

## DRAFT Technical Memorandum

# Contaminant Screening Study Post Clean-Up Evaluation Sampling

Libby Asbestos Site, Operable Unit 4, Libby, Montana
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#### Prepared for:



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Libby Asbestos Site, Operable Unit 4
Libby, Montana
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Post Clean-Up Evaluation Sampling

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## **Acronyms**

AHERA Asbestos Hazard Emergency Response Act ASTM American Society for Testing and Materials

CE Post Clean-Up Evaluation

EPA U.S. Environmental Protection Agency

FSDS field sample data sheet

GO grid opening

HEPA high efficiency particulate air filter

ISO International Organization of Standardization

LA Libby amphibole MCE mixed cellulose ester

mm millimeter

PIF pre-interview form

QAPP Quality Assurance Project Plan

QC quality control

SAP sampling and analysis plan
SRC Syracuse Research Corporation
S/cm² structures per square centimeter
S/cc structures per cubic centimeter
TEM transmission electron microscopy



# Section 1 Introduction

This document is a technical memorandum that describes the field activities, sample collection procedures, and sample results of the post clean-up evaluation sampling program. All field procedures are detailed in the Final Sampling and Analysis Plan (SAP) Addendum, Post Clean-Up Evaluation (CE) Sampling (CDM Federal Programs Corporation [CDM] 2003).

This section provides background information related to the CE sampling and describes the objectives of the CE sampling.

#### 1.1 Background

Because of the potential threats posed to public health by contamination resulting from vermiculite mined in Libby, Montana, the Environmental Protection Agency (EPA) is currently taking a number of clean-up actions intended to reduce the potential for Libby amphibole (LA) asbestos releases from primary and secondary sources, including:

- Removal of indoor vermiculite insulation at locations where the insulation is subject to disturbance (primary source)
- Removal of outdoor soils that contain LA asbestos at concentrations higher than 1 percent by mass (primary source)
- Removal of indoor dust at locations where LA asbestos loading is greater than or equal to 5,000 Asbestos Hazard Emergency Response Act (AHERA) structures per square centimeter (S/cm²) (secondary source)

In addition, EPA is providing high efficiency particulate air filter (HEPA) vacuum cleaners to residents where removal actions were performed. Residents are instructed to use the HEPA vacuums to help reduce and/or eliminate reintroduction of LA asbestos in indoor dust at their properties.

Following each clean-up, confirmation sampling occurs by collecting samples of indoor air using aggressive sampling methods. The aggressive sampling methods include sweeping the floors, ceiling and walls using a leaf blower to dislodge any remaining dust prior to sample collection and placing stationary fans in the area during the sample period to ensure disturbance of remaining dust is maintained thought the sampling period. A property is not declared to be acceptable unless the site-specific clearance rule (in the living areas each of approximately 5 samples of disturbed air on the level(s) or floor(s) cleaned are below the detection limit of the AHERA transmission electron microscopy [TEM] method [AHERA 2002]; and in attics 5 LA structures are allowed over 5 samples analyzed by the AHERA TEM method) is satisfied. Thus, the short-term efficacy of the actions is well-established.



However, a number of important questions remain regarding the longer-term efficacy and permanence of the cleanup.

#### 1.2 Objectives

The objectives of the post clean-up evaluation sampling program was to obtain data that would

- Determine the magnitude of the reduction in exposure level due to the cleanup
- Determine the residual exposure levels of residents in homes after cleanups have been completed
- Determine if residual sources such as dust inside air ducts and furnaces or in carpets and upholstery cause re-contamination of indoor dust in a home, and if so, is that of concern

All data collected as part of the CE, was collected under normal living conditions (i.e., not during household remodeling or other activities that would generate larger than normal dust), with the exception of the sampling conducted at 143 Crossway Ave and 2297 Kootenai River Rd. Remodeling activities were occurring at both these properties during CE sample collection.

# Section 2 Field Activities

This section summarizes the CE field activities of property selection, pre-CE sampling activities, collection of samples, and any deviations in field activities from the documents that governed the CE sampling. The CE sampling program was comprised of three main steps:

- Selection of properties to be sampled
- Pre-CE activities (scheduling CE sampling, pre-interview and meeting)
- Collection of CE samples (ambient air, personal air, and dust)

#### 2.1 Selection of Homes to be Sampled

Selection of homes to be sampled was based on the following criteria:

- Interior cleaning must have occurred this could be a vermiculite insulation removal, an interior cleaning due to elevated dust results, or both.
- Homes that use forced air heating were preferred. As there are a limited number of homes in the area that use forced air heating, homes that use radiant heating were also sampled.
- Homes where vermiculite was left in place (i.e., walls, crawl spaces, sub-floors).
- Properties that were cleaned up early in the project or more recently.
- Properties where an interior cleaning was conducted due to high dust results, but carpeting was not removed.
- Properties that in addition to an interior clean-up had significant exterior contamination removed.

Table 2-1 is a summary of the 31 homes were CE sampling was conducted and how each property relates to the above criteria.

#### 2.2 Pre Clean-Up Evaluation Activities

This section describes the pre CE activities that included contacting home owners regarding participation in the CE activities, scheduling CE sampling, and conducting pre CE interviews and meetings.



Table 2-1 Summary of Post Clean-Up Evaluation Sampling Properties Showing Relation to Selection Criteria and Clean-Up Evaluation Samples Collected

			Clean-lin Eval	luation Selection Ci	iteria					Up Evaluation Samp	ing Details		
	<u> </u>			IBBIICH GEISCHON O	·····					Ambient Air			
Property	Indoor Removal Activities	Type of Heat	Location of Vermiculite	Date of Removal	Interior Cleaning Due to Dust R Carpeting Cleaned but N		Significant Exterior Contamination	Date of Clean-Up Evaluation Sampling	Basement	Ground Floor	Second	Personal Air	Dust (Number with total cm <sup>2</sup>
		Distribution	Left in Place		Reason for Interior Cleaning	Carpet Cleaned or Removed	Removed	}			Floor		collected)
1108 Louisiana Ave	Exterior only	Forced Air	None	September 2003	No interior cleaning of	ccurred	Yes	1/30/2004	2**	1	1	0	1 @ 600 cm <sup>2</sup>
1109 Louisiana Ave	VCI removal	Radiant	None	March 2003	No interior cleaning of	ccurred	No	12/15/2003	1	1	NA	0	1 @ 400 cm <sup>2</sup>
1116 Utah Ave	VCI removal	Radiant	Attic	March 2003	No interior cleaning of	ccurred	No	12/16/2003	. 1	1	1	0	_1 @ 400 cm <sup>2</sup>
1118 California Ave	VC1 removal	Radiant	None	March 2003	No interior cleaning of	ccurred	No_	1/19/2004	Ö	1	0	0 _	1 @ 400 cm <sup>2</sup>
1120 California Ave	VCI removal	Forced Air	None	March 2003	No interior cleaning of	ссипед	No	1/20/2004	0	2**	0	0	1 @ 600 cm²
113 W. Oak St	VCI removal with interior cleaning	Forced Air	Walls	November 2003	Dust result >5,000 S/cm²	Cleaned	Yés	1/21/2004	1*	11	NA.	0	t @ 400 cm²
1202 Idaho Ave	VCI removal with interior cleaning	Radiant	Walls	December 2003	VCI in living space	Cleaned	No	1/29/2004	NA .	1	NA	0	1 @ 400 cm <sup>2</sup>
t212 Louisiana Ave	VCI removal with interior cleaning	Radiant	None	March 2003	VCI in living space	Cleaned	No	1/12/2004	NA	1	1	0	1 @ 400 cm <sup>2</sup>
123 Hamann Ave	VCI removal with interior cleaning	Redient	Unknown	October 2002	Dust result >5,000 S/cm <sup>2</sup>	Removed	Yes	1/29/2004	NA	1	1	0	1 @ 400 cm <sup>2</sup>
1231 Nevada Ave	VCI removal	Forced Air	Walls	October 2003	No interior cleaning of	ccurred	No	1/26/2004	NA	1	NA	0	1 @ 400 cm <sup>2</sup>
1306 Louisiana Ave	VCI removal with interior cleaning	Forced Air	Walis	April 2003	VCI in living space	Cleaned	No	12/15/2003	NA	1	NA	0	1 @ 400 cm²
1417 Washington Ave	VCI removal with interior cleaning	Forced Air	Walls	October 2003	Dust result >5,000 S/cm <sup>2</sup>	Cleaned	No	1/26/2004	NA	1	1	0	1 @ 400 cm²
143 Crossway Ave	VCI removal with interior cleaning	Forced Air and Radiant	Walls and Crawl Space	July 2003	VCI in living space	Removed	Yes	12/08/03 12/09/03 12/10/03	NA	1*	1	2 - 1/day for 2 days	1 <b>@</b> 400 cm²
154 Ski Ad	VCI removal and interior cleaning	VCI removal	Walls	Interior - 11/02 Exterior - 7/03	Cleaned prior to criteria established - Dust results <5,000 S/cm2 and no VCI in tiving space		Yes	1/13/2004	1	1	1	0	1 Ø 600 cm2
178 Scenery Rd	VCI removal	<b>Addiant</b>	None	March 2003	No interior cleaning of	ccurred	No	12/17/2003	2**	1	NA.	0	1 @ 400 cm <sup>2</sup>
2129 Highway 2 S	VCI removal with interior cleaning	Radiant	Ceiling, Walls	May 2003	VCI in living space	Cleaned	No	1/23/04 1/24/04	NA	1	1	0	1 @ 400 cm²
214 W. Larch St	VCI removal with intenor cleaning	Radiant	Walls	May 2003	VCI in living space	Cleaned	No	2/2/2004	NA .	1	NA	0	1 @ 400 cm <sup>2</sup>
2293 Kootenai River Rd	VCI removal with Interior cleaning	Forced Air	Walls, Sub-floor	October 2003	Dust result >5,000 S/cm²	Removed	Yes	11/20/03 12/15/03	1	1	1	1*	1 @ 400 cm <sup>2</sup> and 1 @ 600 cm <sup>2</sup>
2297 Kootenai River Rd	VCI removal with interior cleaning	Forced Air	Walls	October 2003	Dust result >5,000 S/cm²	Cleaned	Yes	1/19/04 1/21/04	_NA	1	NA	1	1 @ 400 cm <sup>2</sup>
83 W. Larch St	VCI removal with interior cleaning	Forced Air	Walls	Feburary 2003	Dust result >5,000 S/cm <sup>2</sup>	Cleaned	No	1/27/2004	1	1	1	0	1 @ 600 cm <sup>2</sup>
6796 Highway 2 S	VC! removal with interior cleaning	Forced Air	Walls	October 2003	VCI in living space	Cleaned	No	1/18/2004	NA	1	NA NA	0	1 @ 400 cm²
38 Spencer Hill Way	Interior cleaning	Forced Air	None	September 2003	Dust result >5,000 S/cm <sup>2</sup>	Cleaned	Yes	1/28/04 1/30/04	NA .	1	NA	1	1 @ 400 cm²
450 Farm to Market Fld	VCI removal	Forced Air	None	October 2003	No interior cleaning o	ссилес	Yes	12/18/2003	1	1*	NA.	0	1 @ 400 cm <sup>2</sup>
505 Louisiana Ave	VCI removal	Forced Air	Altic	March 2003	No interior cleaning o	ccurred	No	1/13/2004	NA	1	1	0	1 @ 400 cm <sup>2</sup>
52 Pearl St	VCI removal with interior cleaning	Forced Air	Walls	May 2003	VCI in living space	Cleaned	No	1/16/2004	1	1	1	0 .	1 @ 600 cm <sup>2</sup>
603 W. 101h SI	VCI removal with interior cleaning	Forced Air and Radiant	None	July 2003	VCI in living space	Cleaned	Yes	12/15/03 12/16/03 12/17/03	3 - 1/day for 3 days	3 - 1/day for 3 days	NA	3 - 1/day for 3 days	1 @ 400 cm²
616 Wisconsin Ave	VCI removal with interior cleaning	Forced Air	Subfloor	May 2003	VCI in living space	Cleaned	No	1/17/2004	1	1	1	0	1 @ 600 cm <sup>2</sup>
620 Ulah Ave	VCI removal	Forced Air	Ceiting	March 2003	No interior cleaning o	ccurred	No	1/8/2004	NA	1	1	0	1 @ 400 cm²
	Interior cleaning	Radiant	None	October 2003	Dust result >5,000 S/cm <sup>2</sup>	Cleaned	Yes	1/16/2004	. 1	1	NA	0	1 @ 400 cm <sup>2</sup>
713 Michigan Ave	VCI removal with interior cleaning	Forced Air	Attic	May 2003	VCI in living space	Cleaned	No	1/12/2004	NA NA	1	1	0	1 @ 400 cm <sup>2</sup>
86 Paliga Dr	Interior cleaning	Radiant	None	August 2003	Dust result >5,000 S/cm²	Cleaned	Yes	1/23/2004	1	1	NA	0	1 @ 400 cm²
	<del></del>		·			<del></del>			<del></del>	66		8	32
- Samples with detects of Libby	v Amohibote (f. A).												

<sup>\* -</sup> Samples with detects of Libby Amphibote (LA)

Properties where LA was detected

<sup>\*\*1</sup> field sample and 1 field replicate sample collected from this location

NA - Property does not contain that floor

#### 2.2.1 Scheduling Clean-Up Evaluation Activities

Once a list of potential properties meeting the criteria detailed in Section 2.1 was compiled, CDM community involvement personnel began contacting residents in November 2003 to determine which property owners would be willing to participate in the CE sampling.

#### 2.2.2 Pre-Sampling Interview and Meeting

Prior to or during initial sample collection, an interview and meeting was conducted with each resident. The purpose of the interview was to capture information regarding any activities the residents may be involved in or properties routinely visited by the occupants that could reintroduce LA contamination into their home. The interview was documented on a pre-interview form (PIF) (Appendix A). The PIF also captured information regarding the use of EPA provided HEPA vacuums.

A pre-sampling meeting was conducted to provide each resident with information regarding the sampling equipment to be used, and who to contact if there were any issues with the equipment. The pre-sampling meeting was also used to provide the occupants where personal air samples are being collected with instructions on how to complete the activity log (Appendix A). The activity log was used to record the activities of the resident during personal air sample collection.

#### 2.3 Collection of Clean-Up Evaluation Samples

Three types of samples were collected during the CE activities: ambient air, personal air, and dust. CE sampling activities began on November 20, 2003, and continued until February 2, 2004. This section summarizes the collection procedures used, any deviations to the sample procedures, and summarizes the number of samples collected.

#### 2.3.1 Ambient Air Sample Collection

A total of 66 ambient air field samples were collected in 31 homes under normal living conditions in accordance with the Sampling and Quality Assurance Project Plan (QAPP) Revision 1 for Libby, Montana, Environmental Monitoring for asbestos, Baseline Monitoring for Source Area and Residential Exposure to Tremolite-Actinolite asbestos Fibers (EPA 2000), also known as the Phase 1 QAPP. A summary of the samples collected is provided in Table 2-1.

High volume air pumps were used to collect one ambient air sample per floor of the living space. If needed, additional samples were collected depending on the square footage of each floor. Each sample was collected in a centrally located area to avoid interference from outside air.

In order to achieve the desired analytical sensitivity a total air volume between 6,000 and 8,000 liters was pulled through each 25 millimeter (mm) 0.8 micron mixed cellulose ester (MCE) sampling filter at a flow rate that captured this volume in one 10



to 12 hour period. Every two to three hours each sampling filter was checked for loading and the flow rate measured. Due to observed filter loading in homes where the resident is a smoker, uses a wood burning stove, or has indoor pets, some samples were collected at less than 6,000 liters. Due to filter loading a total of 7 samples were collected with a total air volume less than 6,000 liters.

A stationary air field sample data sheet (FSDS) and logbook entries were completed for each sample (included in Appendix A).

#### 2.3.2 Personal Air Sample Collection

A total of 8 personal air field samples were collected in 5 homes under normal living conditions in accordance with the Phase 1 QAPP (EPA 2000). A summary of the samples collected is provided in Table 2-1.

In order to achieve the desired analytical sensitivity a total air volume between 6,000 and 8,000 liters was pulled through a single 25 mm 0.8 micron MCE sampling filter at a flow rate that captured this volume in three 8 to 10 hour periods (3 days). One ambient air sample was collected per floor of the living space each day of personal air sample collection. The ambient air sample was collected at or just above the same flow rate used to collect the personal air sample. This was done to ensure the same volume of air was sampled during the same time period for both the personal and ambient air samples.

Every two to three hours each sampling filter was checked for loading and the flow rate measured. Due to observed filter loading in homes where the resident is a smoker, uses a wood burning stove, or has indoor pets, some samples were collected at less than 6,000 liters. Due to filter loading a total of 8 samples were collected with a total air volume less than 6,000 liters.

During the collection of personal air samples, each resident being sampled completed an activity log (Appendix A) that generally described the activities they conducted while wearing the sampling pump. Residents were instructed that during the time of sample collection they should turn off the pump if they leave their property. If the occupant wearing the pump exited the home but remained outdoors on their property, the sampling included this period of time.

A personal air FSDS and logbook entries were completed for each sample (included in Appendix A).

#### 2.3.3 Dust Sample Collection

A total of 32 dust field samples were collected from 31 homes. A summary of the samples collected is provided in Table 2-1. As detailed in the CE SAP (CDM 2003), dust samples were collected in accordance with the SAP for Indoor Dust, Revision 0, Version 2 (CDM and Syracuse Research Corporation [SRC] 2003), also know as the dust SAP, with the following exceptions:



- One dust sample was collected per house
- Each dust sample was a minimum of a 400 cm² composite that was collected over all floors (i.e., basement, ground floor, second floor, etc.)
- For multiple floor homes one 100 cm² high traffic area and one 100 cm² horizontal surface sample was collected from each floor on a single sample cassette
- For single floor homes two 100 cm² high traffic areas and two 100 cm² horizontal surfaces were collected from each floor on a single sample cassette
- No dust blanks were to be submitted

A dust FSDS and logbook entry was completed for each sample (included in Appendix A).

#### **Deviations to Dust Sample Collection**

- Two dust samples (CE-00001 and CE-00002) were collected at 2293 Kootenai River Rd. Two samples were collected due to the condition of the home at the time of CE sampling. Because the house was being remodeled during the sampling event, one dust sample was collected from the section of the house that was being remodeled and the second sample was collected from portions of the house that were not being remodeled.
- One dust sample (CE-00051) collected at 1116 Utah Ave was collected over a total of 400 cm² and should have been collected over a total of 600 cm². This deviation occurred as a result of this property being one of the first properties to be sampled during the CE and the incorrect number of dust sampling locations being collected. The two locations that were not included were one 100 cm² area from a horizontal surface in the basement and one 100 cm² area from a horizontal surface on the ground floor. Based on the assumption that LA distribution is evenly distributed within the living space the smaller area sampled at this property will not affect the quality of this sample result.
- As detailed in Libby Field Office Record of Modification Form LFO-000064a and 64b, the frequency of QC sample collection was changed to the following requirement: one field blank was collected at a frequency of one per team per day and analyzed at a frequency of one per team per week for each media. Three field dust blanks were collected.



#### **Section 3**

#### Results

This section provides a summary of the analytical methods used to analyze the samples collected as part of the CE, the analytical sensitivity of the analytical methods, and a summary of the results.

#### 3.1 Analytical Methods

The CE SAP (CDM 2003) required all air and dust samples collected be analyzed by TEM according to International Organization of Standardization (ISO) Method 10312 (ISO 1995). As documented in Libby Field Office Record of Modification Form LFO-000074 (Appendix B) the analytical method used to analyze the dust and air samples collected during this investigation was changed to the TEM AHERA method, and dust samples were prepared for analysis using American Society for Testing and Materials (ASTM) method 5755. All samples were analyzed at the on-site laboratory in Libby.

#### 3.2 Sensitivity Limits

The minimum detection limits required for air samples collected as part of the CE activities was specified to be 0.0001 structures per cubic centimeter (S/cc) in the SAP (CDM 2003). Due to the large amount of grid openings (GO) that may be required to be read in order to reach this analytical sensitivity, a target analytical sensitivity was established. The target analytical sensitivity of 0.0001 S/cc for personal and stationary air samples was modified to include a not to exceed GO count of 50 GOs. If a sensitivity of 0.0001 S/cc could not be achieved within 50 GOs, the laboratory counted until a target analytical sensitivity of 0.0002 S/cc was reached, or until 50 GOs were read, which ever came first. This deviation is described in Libby Field Office Record of Modification Form LFO-000078 (Appendix B).

The minimum detection limit required for dust samples collected as part of the CE activities was specified to be 500 S/cm<sup>2</sup>. This sensitivity was achieved for all samples except one, where the detection limit was reported at 502 S/cm<sup>2</sup>.

#### 3.3 Summary of Results

A total of 106 field samples (66 ambient air, 8 personal air, 32 dust) were collected during the CE activities described in this technical memorandum. In addition a total of 6 field blanks were submitted for analysis (3 for air, and 3 for dust), as well as one air field replicate sample. This section and Table 3-1 provides a summary of the results.

#### 3.3.1 Ambient Air Sample Results

Of the 66 ambient air field samples collected during the CE activities, 4 samples showed detects of one structure of LA at each of the following properties:



Table 3-1 Results of Post Clean-Up Evaluation Samples

								Pre Vol.					-		-			AHERA!	A971H 6765					-		
Sample 10	Property Group (Location)	Bample Group	Location Description	Media Type	· Madrix .	Sample Type		Post Are		Data	1	Libby A	mphiboles ( LA )	<del></del> -		Chry	raotiu (C)		<u> </u>	Other	Amphiboles I CA	<del>5 -</del>		Total Asb	nation to	
	(10000)		(Sub Location)			Туре	. [	Clear (cn		Non Aratyzed		9>6u	Astronati (S/mm2)	Astrone (S/oc)	8c6u	655U	Asb load (S/mm2)	Asb conc (S/oc)	8-c5u I	8>5u	Auto load (S/Incn2)	Astrono (S/co)	Asbestos Type   8-6	<del></del>	Ash load (S/mm2)	Ash cone (3/ac)
CE-00121	1108 Louisiana Ave	Basement	Basement	Ab	Indoor	Stationary	Field Sample	N/A 6	588 1/30/2	04 Overloaded	+		<0	<0	- 0		· · · ·	< 0	-	<del>-</del>	< <u>0</u>	<0	20010000	-	< 0	< 0
CE-00121	1108 Louisiane Ave	Besement	Basement		Indoor	Stationary	Field Sample	N/A 6	589 1/30/2	<del></del>	0	0.	< 10.51	< 0.0008	. 0	0 <	10.51	< 0.0006	0	0	< 10.51	< 0.0008		0 0	< 31.53	< 0.0018
CE-00122 CE-00122	1108 Louisiana Ave	Basement	Basement	Air	Indoor	Stationary			589 1/30/24		9		< 10.51	< 0.0008		0 4	(10.51	< 0.0006	0	- 4	< 10.51 < 0	< 0.0006			< 31,53	< 0.0018
CE-00123	1108 Louisiana Ave	Basement House	Ground floor bedroom		Indoor	Stationary		N/A 6	569 1/30/20 560 1/30/20		1 4	<del></del>	< 10.51	< 0.0006	0	- 4 -	<10.51	< 0.0008	- 4	<del>-  </del>	<10.51	< 0.0006	·		< 31.53	< 0.0018
CE-00123	1108 Louisiana Ave	House	Ground floor bedroom	$\rightarrow$	Index	Stationary	Fletd Sample	N/A 6	580 1/30/2		<del> }</del>		< 0	<0	0		(10.21.	< 0	- 1	- 6	< 0	< 0	-·  <del>-</del> -		<0	< 0
CE-00124	1108 Louisiana Ave	House	2nd floor, lop of steps	Act	Index	Stellonary			571 1/30/20	04	0	0	< 10.51	< 0.0006	0	0 4	10.51	< 0.0006	0	9	< 10.51	< 0.0008		0 0	< 31,53	< 0.0018
CE-00124	1108 Louisiana Ave	House	2nd floor, top of steps	AF	Indoor	Stationery			571 1/30/2	<del></del> _	1 9		<0	< 0	0	. 0 4	<u> </u>	< 0	0	- 0	< 0	<0		0 0	< 0	< 0
CE-00125 CE-00041	1108 Louisiana Ave	House	Besement, 2nd level, groundfloor	Dust Alt	Honzonisi curisce & high traffic area	Stationary .			600 1/30/20 076 12/15/2		01	O		< 0.0001	23	<del>3 </del>	7,300.92	4,685	1 0	<u>\range</u>	< 280.75	< 0 0001	<del>  </del>		< 7,822.41 < 7.05	< 5,019
CE-00042	1109 Louisiana Ave	House	Living room Basement	Alr	Indoor	Stationary			079 12/15/2		1 3	- 0	< 2.35	< 0.0001	<del>  </del>		(2.35	< 0.0001	0	<del></del> ;	< 2.35	< 0.0001			₹ 7.05	< 0.0004
CE-00044	1109 Louisiana Ave	House	Besement & ground floor HS/HTW		Horizonial surface & high traffic area	<u> </u>			400 12/15/2		. 0		< 130.97	< 125	0		130.37	< 125	o	0	< 130.37	< 125			< 391.12	< 376
	11t6 Uleh Ave	House	Besement		Indoor	Stationary			160 12/16/2		9		< 2.35	< 0,0001	0		2.35	< 0.0001	0	0	< 2.35	< 0.0001			< 7.05	< 0.0004
CE-00049 CE-00050	1116 Utah Ave	House	2nd level top of steps kitchen/dining room	Air	Indoor	Stationary			162 12/16/2 152 12/16/2		1 0		< 2.35	< 0.0001	. 0		< 2.35 < 2.35	< 0.0001	<del>- 있</del>	-	< 2.35	< 0.0001	<del> </del>		< 7.05 < 7.05	< 0.0004
CE-00051	1116 Utah Ave	House	Basement/ground floot/second level HS/HTW		Honzontal surface & high traffic area	Stationery			400 12/16/2		1 0		< 130 37	< 125	- 4		(130.37	< 125			< 130.37	< 125	<del> </del>		< 391.12	< 376
CE-00079	1118 California Ave		Kitchen, hallway		Indoor	Stationary			109 1/19/2		0	<del></del> :+	<0	< 0	- 0		< 0	<0	0	- 6	< 0	< 0	<del> </del>		< 0	1 4 0
CE-00079	1118 California Ave		Kitchen, halbeay	Air	Indoor	Stationary	Field Sample		1/18/20		<u> </u>		< 10.51	< 0.0007			10.51	< 0.0007		0	< 10.51	< 0.0007		0 0	< 31.53	< 0.0018
CE-00080	1118 California Ave	House	Ground floor		Horizontal surface & high traffic area		Field Sample	N/A	400 1/19/20		0	. 0	< 325,93	< 314	٥	0 <	(325.80)	< 314	0	0	< 325,83	< 314		0 0	< 977.50	< 941
CE-00082	1123 Celifornia Ave	Basement	Basement		Indear		Field Sample			04 Overloaded			< 0	< 0	- 0			< 0	0	0	< 0	< 0			< 0	<0
CE-00062 CE-00063	1120 California Ave 1120 California Ave	Besement Basement	Basement Basement	Arr	Indoor	Stationary Stationary	Field Sample Field Replicate		716 1/20/20 716 1/20/20		<del>                                     </del>	9	< 10.51	< 0.0007	0		c 10.51	< 0.0007	7	9	< 10.51	< 0.0007	<del>                                     </del>		< 31.53	< 0.0018
CE-00083	1120 California Ave	Basement	Basemont	Air	Indoor	Stationery		N/A 5		<del></del> _		0	< 10.51	< 0.0007	0		10.51	< 0.0007	ŏ	<del>,</del>	< 10.51	< 0.0007	<del></del>		₹ 31,53	< 0.0018
CE-00086	1120 California Ave	House	Basement, ground floor, second fevel	Duet	Horizontal surface & high traffic area		Field Sample		500 1/20/20		ů		< 325.93	< 209	0	- 0 4	325.93	< 208	0	_	< 325 93	< 209		0, 0	< 977.80	< 627
CE-00067	113 W. Oak St		Ground level meuter bedroom	Ar	Intigot		Fleid Sample		258 1/21/20		0	1	242	0.0001	0		2.42	< 0.0001	0	9	< 2.42	< D.0001			< 7.27	< 0.0004
	113 W Oak St	Besegment.	Bredment covered floor		Indoor	Stationary	Field Sample		240 1/21/20	<del></del>	<u> </u>		2.42	0,0001	9		434.58	< 0.0001	- 0	- 9	< 2.42	< 0.0001	<del> </del>		< 1,303.74	< 0,0004
	113 W. Oak St 1202 Idaho Ave	House	Sustineeri, ground floor South sewing room	- Oust - Air	Honzontal surface & high traffic area	Stationary	Field Sample		400 1/21/20 095 1/29/20		1 0		< 434,58 < 10,51	< 0.0007	0		(10.51	< 0.0007	0	0	< 434.58 < 10.51	< 0.0007			< 31.53	< 1,255 < 0.0020
CE-00113	1202 Ideho Ave	House	South sawing room	Air	Indoor		Field Sample		095 1/29/20		0		<0	< 0	- 0	- 0 3	<del></del>	< 0	0		1 < 0	< 0	<u> </u>		< 0	< 0
CE-00114	1202 Idaho Ave	House	GF HS/HTW	Dus1	Horizontal surface & high traffic area	<u> </u>		N/A	400 1/28/20	04	0	0	< 260.75	< 251	٥		260.76	< 251	0	_	< 260.75	< 251			< 782.24	< 753
CE-00032	1212 Louis and Ave	House	Kitchen		Indoor	·			254 1/12/20		0	q	< 2.35	< 0.0001	0	0 <		< 0.0001	0	0	. < 2.35	< 0.0001		0 0	< 7.05	< 0.0004
	1212 Louisiana Ave 1212 Louisiana Ave	House	2nd level hallway Ground loor, second level	Alt	Indeor Horizontal surface & high traffic area	Stationary			118 1/12/20 400 1/12/20		<del> </del>	- <del></del> 9	< 2.35	< 0.0001	0		2.35	< 0.0001 < 125	<del>}</del> -	- 위	< 2.35 < 130.37	< 0.0000 < 125			< 7.05 < 391,12	< 0.0004
	123 Hamanii Ave	House	Living room	Ousl	Indoor	Sintionary		N/A 6	700 1/29/20		0	- 6	< 10.51	< 0.0008	0		10,51	< 0.0008	0	_	< 10.51	< 0.0006	<del>-   -</del>		< 31.53	< 0.0018
CE-00059	123 Hamann Ave	House	Living room	Air	Indoor	<u> </u>			700 1/29/20				<del>4</del> 0	<0	<del></del>	- 0 -		₹0			< 0	< 0		_	<0	<0
	123 Haman: Ave	<del></del>	Master bedroom		Indoor	Stationary		N/A 6			0.	D	< 10.51	< 0.0006	. 0		10.51	< 0.0005	0	_	< 10.51	< 0.0006			< 31.53	< 0.0018
CE-00060	123 Homann Ave	House	Master bedroom		Indeor	Stationary			736 1/29/20				<0	<0	0	. 0 <		<0	0		< 0	<0			< 0	<u> </u>
	123 Hamann Ave 1231 Nevada Ave	House	GF & 2nd level HSAHTW  Master bedroom		Horizontal surface & high traffic area	Stationery	Field Sample		400) 1/29/20 215 1/26/20		0			< 0.0001	- 0	- 9 3		< 314 < 0.0001	0		! < 325 93 - < 2.35	< 0.0001			< 977 80 < 7.05	< 941
	1231 Nevada Ave	House	Ground floor		Horizontal surface & high trelfic area	Stationary	Field Sample		400 1/26/20		1 8			< 314	—-∦-		325.93	< 314	<del> </del>		< 325.93	< 314	<del></del>		< 977.80	< 941
	1306 Louis ana Ave		Living room	Air	Indoor	Stationary	Field Sample		78 12/15/2		. 0		< 2.35	< 0.0001	0	0 <	2.35	< 0.0001	0	0	< 2.35	< 0.0001	- 1	0 0	< 7.05	< 0.0004
	1306 Louzsiana Ave	House	Ground floor HS/HTW	Oust	Horizontal surface & high traffic area				12/15/2		o		< t30.37	< 125	0			< 125	Û	0	< 130.37	< 125		0 0	< 391.12	< 376
	1306 Louisiana Ave		BLANK	Air_	IN/A	Stationary		N/A	12/15/2		0		< 3.88	-10000	0	0 <		< 0.0001	이	_	< 3.66	< 0.0001			< 11.63 < 7.05	< 0.0004
	1417 Weshington Ave 1417 Washington Ave	House House	Kitchen 2nd level		Indoor		Field Sample		1/26/20 167 1/26/20		0			< 0.0001	<del></del>	- 4 3		< 0.0001	- 0		< 2.35	< 0.0001	<del> </del>		< 7.05	< 0.0004
	1417 Washington Ave	House	Ground floor, second level		Horizontal surface & high traffic area		Field Sample		1/26/20		<del>  -    </del>			< 314	0			< 314	o		₹ 325.93	< 314			< 977.80	< 941
CE-00106	1417 Washington Ave	Blank	NA		N/A	Stetionary	Field Blank	N/A	1/26/20	04	0	D	< 3.88		0	0 <			Ò		√ 3.88 I				< 11.63	
	143 Crossway Ave		Shoulder		Indoor	Personal	Field Sample		12/8/20				< 0.76	< 0.0001	- 이	0 <		< 0.0001	0		< 0.76	< 0.0001 < 0.0001	-		< 2.28	< 0.0004
	143 Crossway Ave		Diring room 2nd level, master bedroom, doorway		Indoor	Stationary	Field Sample Field Sample		246 12/8/20		1 1		2.75 <2.75	< 0.0001	<u> </u>	0 <		< 0.0001			< 2.75 < 2.75	< 0.0001	<del></del>		< 8.24	< 0.0004
	143 Crossway Ave		Shoulder		Indoor		Field Sample		194 12/9/20		1 0		<1.24	< 0.0001	· <del> </del>	- 0 <		< 0.0001	9		< 1.24	< 0 0001			< 3.72	< 0.0004
CE-00006	143 Crossway Ave	6lank	NA	Ad	N/A	Stationary	Field Blank	N/A	12/10/2	203	0		< 3.85		0	0 <			_ 0	_	< 3.85				< 11.54	
	143 Crossway Ave		Ground floor & 2nd floor		Honzantel surface & high traffic eres		Field Sample		12/10/2				< 431.24	< 415	0			< 415	<u> </u>		< 431.24	< 415			₹1,293.71	< 1.245
	154 Ski Rd 154 Ski Rd		2nd level west bedroom	Air	Indoor		Field Sample		1/13/20		0		< 2.35 < 2.35	< 0.0001	0	0 <	2.35	< 0.0001	0	0	< 2.35	< 0.0001		0 0	< 7.05	< 0.0004
	154 Ski Rd		Ground level laving room  Center of basement		Indoor		Field Sample		122 1/13/20 140 1/13/20		╅		₹ 2.35	< 0.0001	ď	<del>-    </del>		< 0.0001		히	2.35	< 0.0001		0 0		< 0.0004
	154 Ski Rd		Basement, ground floor, second level		Horizontal surface & high traffic area		Field Sample		000 1/13/20		0			< 187	0			< 167	0		< 260.75	< 187				< 502
	176 Scenery Rd		kitehen		Indeat		Field Sample				. 0			< 0.0001	0	0 <		< 0.0001	- 0		< 2.35	< 0.0001			< 7.05	< 0.0004
	178 Scenary Rd		Bedroom	Air			Field Semple				1 3			< 0.0001	9	0 <		< 0.0001	<u> </u>		< 2.35	< 0.0001 < 0.0001	<del>  </del>		< 7.05 < 7.05	< 0.0004
	178 Scenery Rd 178 Scenery Rd		Bedroom Basement, ground their HS/HTW		Horizontal surface & high traffic area	Orders and A	Field Replicate Field Sample				1			< 251				< 251				< 251	<del></del>		< 782.24	< 753
	2129 Highway 2 S		2nd level		Indoor	Stationary	Field Sample				0			< 0.0001	0	<u> </u>		< 0.0001	0		< 2.50	< 0.0001			7,50	< 0.0004
CE-00091	2129 Highway 2 S	House	iving room ground level	Air	Indoor	Stationary	Field Sample	N/A 6	20 1/24/20	D4	0	-0	< 2.50	< 0.0001	o -	0 <		< 0.0001	0		< 250	< 0.0001			< 7.50	< 0.0004
	2129 Highway 2 S		Snound floor, second level		Horizontal surface & high traffic area		Field Sample		00 1/23/20		0			< 251	9			< 251	0		< 260.75	< 251	<del></del>		< 762.24	< 753
	214 W. Larch St 214 W. Larch St		Citchen	Air Air	Indoor		Field Sample Field Sample				1 0			< 0.0007		0 <		< 0.0007			i < 10.51	< 0.0007	-		< 31,53	< 0.0020
	214 W. Larch St		Basement/ground level HS/HTW		Horizontal surface & high traffic area	- Станопогу	Field Sample		100 2/2/20		1 0			< 251	0			c 251	6		< 260.75	< 251	<del>                                     </del>		< 782.24	< 753
CE-00001	2293 Kootenal River Rd	House	Basement, ground floor	Dust	Horizontal surface & high traffic area		Field Sample		100 11/20/2		0		< 129.37	< 125	0	0 <	129.37	< 125	0	Ö	< 129 37	< 125		0 0	< 388.11	< 374
	2293 Kootenal River Rd	House	Basement, ground floor, second level	Dust	Horizontal surface & high traffic area		Field Sample	N/A (	11/20/2	03	0,	0	< 431,24	< 277	0			< 277	0		< 431.24	< 277			< 1,290.71	< 630
	2293 Kootenei River Rd		Basement finished		Indoor		Field Sample				<u> </u>			< 0.0001 < 0.0001		- 0 <		< 0.0001	- 0		< 2.58	< 0.0001	<del> </del>		< 7.75 < 7.75	< 0.0004
	2283 Koolensi River Rd 2283 Koolensi River Rd		Living room untinished  WW bedroom		Indoor		Field Sample				<del>   </del>			< 0.0001	<del></del>	- 0 3		< 0.0001	<del>  </del>		< 2.67	< 0.0001	<del> </del>		< 8.02	< 0.0004
	2203 Kapteral River Rd	<del></del>	Shoulder	- <del>~</del>			Field Sample				0			0.0001	0	0 <		< 0.0001	0		,< 1.69	< 0.0001	<u> </u>		< 5.67	< 0.0004
CE-00077	2297 Kootenei River Rd	House	Shoulder	Air	Indoor	Parsonal .	Field Semple	N/A 4	728 1/19/20	04	0	_ 0	< 1.60	< 0.0001	0	0 <		< 0.0001	0		< 1.60	< 0.0001			< 5.41	< 0.0004
	2297 Kootener Filver Rd		Aving moon		Indoor		Field Sample				0			< 0.0001	0			< 0.0001	0		< 2.98	< 0.0001	<b> </b>		< 8.94	< 0.0004
	2297 Kootenal River Rd		Ground floor		Horizonial surface & high traffic area		Field Sample				- 0			< 314	0	- 0 <		< 314 < 0.0007	0		< 325.93	< 0.0007	<del></del>		< 977.80 < 31,53	< 941
	233 W. Larch St 233 W. Larch St		Basement Basement		Indoor		Field Sample Field Sample				<del>                                     </del>			< 0.0007	4	<del></del>		< 0	4		< 10.51	< 0.0007	<del> </del>		< 0	< 0
	233 W. Larch SI		Bround level kitchen		Indoor	Stationary	Field Sample	N/A 6	158 1/27/20		<u></u>			< 0.0007		0 3		< 0.0007	<u> </u>		< 10.51	< 0 0007			< 31 53	< 0 0020
CE-00108	233 W. Lanch SI		Bround level kitchen	Ast _	Indoor	Stationary	Field Sample	N/A 6	1/27/20	04 Overloaded	0	0	< 0	< 0	0	0 <		< 0	0		1<0	<0			< 0	<0
	233 W. Larch St		nd level hellway		Indoor		Field Sample				. 0			< 0	0	0 <		< 0	_ 0		< 0	< 0			< 0	< 0
	233 W. Larch St		and level heliway desement, ground floor, second level		Indoor Horizonial surface & high traffic area		Field Sample				<del> }</del>  -			< 418	<del></del>	0 <		< 0 0007	<del>   -</del>			< 0.0007 < 418			< 31.53 < 1,955.60	< 0.0020 < 1,255
	233 W. Larch St 3796 Highway 2 S		living room		Indoor		Field Sample				- 4		< 2.21	< 0.0001			2.21	< 0.0001	al			< 0.0001	<del></del>		< 8.64	< 0.0004
			Ground floor HS/HTW		Horizontal surface & high traffic area		Field Sample		1/8/20		1 - 1			< 314	히			< 314	0		< 325.93	< 914			₹ 977.80	< 941
CE-00027 :	3796 Highway 2 S																									

Table 3-1 Results of Post Clean-Up Evaluation Samples

	Property Group		Location Description			Sample		Pre	Noi UTA			-							AHERA /	ASTM 67	755				_			
	(Location)	Sample Group	(Sub Location)	Media Type	Metrix	Type	Category	Post		Sample Date	1		Libby	Amphiboles (L	A)		0	hgraotile (C)		T	Other	Amphiboles ( O.	k)		T	om) Asbeut	.00	
								Clear	(cm²)		Filter Status Non Auglyzed	S-c64	S>5u	Asb load (S/mm2)	Asb conc (8/cc)	\$<60	\$>84	Ast load (S/mm2)	Asb conc (S/oc)	Sefei	S>-5u	Asb load (S/mm2)	Asto conc (S/ec)	Asbettos Type Identified	S-c5u	\$5- <b>\$</b> U	Aeb loed (6/mm2)	Asb conc (\$/cc)
CE-00111	39 Spencer Hill Way	House	Shoulder	Air	Indoor	Personal	Field Sample	N/A	5279	1/28/2004		0	0	< 10.51	< 0.0008	0		< 10.51	< 0.0008	. 0	0	< 10.5t	< 0.0008		0	0	≥ 31.53	< 0.0023
CE-00111	38 Spencer Hill Way	House	Shoulder	Air	Indoor	Personal	Field Sample	NVA	\$278	1/29/2004	Overloaded	0	0	<0	<0	. 0	0	< 0	< Q	0	0	< 0	< 0		0		< 0	-< 0
CE-00112	38 Speriocr Hill Way	House	Helhray ground (cvcl	Ait	Indoor	Stationary -	Field Sampte	N/A	8999	1/28/2004	Overloaded		0	< 0	< 0	0		_< o	-< 0	1 0	0	< 0	< 0		٥		< 0	< 0
CE-00112	38 Spencer Hill Way	House	Hallway ground level	Air	Indoor	Stationary i	Field Sample	N/A	6939	1/28/2004	1	0	0	< 10.51	< 0.0008	0	0	< 10.51	< 0.0008		0	< 10.51	< 0.0006		0	0	< 31.53	< 0.0017
CE-00116	38 Spencer Hill Way	House	GF HSAITW	Duca	Horizontal surface & high traffic area		Fleid Sample	NVA	400	1/30/2004	<u> </u>		0	< 260.75	< 251	0	0	< 260 75	< 251	- 0	0	< 260 75	< 251		•		< 762.24	≺ 753
CE-00117	38 Spencer Hill Way	Black	Blank	Dust	NVA		Field Blank	₽¥A	(0	1/30/2004	I	<u> </u>	1 0	≤ 52.15	<del></del>	1 0	Q Q	4 52.15	<u>i                                     </u>	<u></u>	<u>)</u> 0	< 52.15		<u> </u>	. 0		< 156.45	
	450 Ferm to Market Rd	Ность	Hattway connecting living room and hadroom	Ak	indoor	Stetlonary	Field Sample	N'A	6226	12/15/2000		<u> </u>	1	2.50	0 D002	1 0	ð	c 2.50	< 0.0003	<u> </u>	0	<b>₹</b> 2 50	< 0.0002				< 7.50	< 0.0005
CE-00057	450 Ferm to Market Rd	Home	Basement	Air .	Indeor	Stationary	Proto Sample		8217	12/18/2003		<u> </u>	0	< 2.35	< 0.0001	<u> </u>	<u> </u>	< 2.35	< 0.0001	<u> </u>	<u> </u>	< 2.35	< 0.0001		9		c 7.05	< 0.0004
CE-00058	450 Farm to Market Rd	House	Besement & ground floor HSAHTW	Dust	Horizontal ourface & high traffic area		Field Sample	N/A	400	12/18/2003			0	< 280.75	< 251	0	0	< 260.75	< 251	<u> </u>	) 0	< 260.75	< 251_		. 0		∡ 782 24	< 753
CE-00039	506 Louisiana Ave	House	Ground level kitchen	Air	Indeer	Stationary	Field Samplo	N/A	8082	1/13/2004			0	< 2.35	< 0.0001	0	0	< 2.35	< 0.0001		0	< 2.35	< 0.0001				< 7.05	< 0.0004
CE-00040	505 Louisiana Avo	House	2nd level G top of steps	Air	Indoor	Stationary	Field Sample	N/A	6109	1/13/2004		10	0	< 2.35	< 0.0001	0	0	د 2.35	< 0.0001	1 0	0	< 2.35	< 0.0001		0		< 7.05	< 0.0004
OE-00061	505 Louisiana Ave	House	Ground floor, second level	Dust	Horizontal surfece & high traffic area		Fictd Sampte	N/A	400	1/13/2004	!	[0	0	< 260.75	< 251	0	0	4 280.75	< 251	0	<u> </u>	< 260.75	< 251		. 0		∡ 782.24 T	< 753
CE-00065	52 Pearl St	House	Basement bedroom	Air	Indoor	Stationery	Fictol Sample	N/A	6091	1/16/2004		, ,	0	< 2.35	< 0.0001	0	0	< 2.35	< 0.0001	<u> </u>	0	< 2 35	< 0.0001				< 7.05	< 0.0004
CE-00068	52 Pearl St	House	Ground level living room	Air	Indoor	Stationary	Field Sample	N/A	5244					< 2.42	< 0.0001	<u></u>	0	c 2.42	< 0.0001		) 0	< 2.42	< 0.0001		. 0		< 7.27	< 0.0004
CE-00067	52 Pearl 51	House	2ml level hallway	Air	Indoor	Stationary	Field Sample	N/A	6204	1/18/2004		0	0	< 2.35	< 0.0001	0		< 2.35	< 0.0001	9	0	< 2.35	< 0.0001	}	. 0		< 7.05	< 0.0004
CE-00066	\$2 Pearl 51	House	Basement, ground floor, second level	Dust	Horizontal curtace & high traffic area		Frett Sample	N/A	600	1/18/2004		0	0	< 325.93	< 209	0		< 325.93	< 209	1 0	) <u> </u>	< 325.93	< 209	<u> </u>	. 0	_	< 977.80	< 627
ČE-00010	603 W. 10th St	House	Shoulder	Ak	Indoor	Personal	Field Sample	N/A	1737	12/15/2003		0	0	د 1.55	< 0.0003	. 0		c 1.55	< 0.0003	_	)† 0	< 1.55	< 0.0003				< 4.65 ↓	< 0.0010
CE-00011	603 W. 10th St	House	Living room	Air	Indoor	Stationary	Field Sample	N/A	2413	12/15/2003			0	< 1.55	< 0.0002		0	< 1.56	< 0.0002	0	0	< 1.55	< 0.0002		0		< 4.65	< 0.0007
CE-00012	603 W. 10th St	House	Besoment	Air	Indoor	Stationary	Flets Sample	N/A	2417	12/15/2003		0	1 0	< 1.55	< 0.0002	0	9	< 1.55	< 0.0002	0	1 0	< 1.55	< 0.0002		. 0		< 4.65	< 0.0007
CE-00017	603 W. 10th St	House	Shoulder	_ Air	Indoor	Personal	Field Sample	N/A	1928	12/18/2003	l	ļ., 0	0	< 1,5S	< 0.0003	٠ ٠	이	< 1.5\$	< 0.0003		9 0	< 1.55	< 0.0003	ļ	0		< 4.85	< 0.0009
CE-00018	603 W. 10th St	House	Living room	Air	Indoor	Stotionary	Field Sample	N/A	2512	12/16/2003		<u> </u>	0	< 1.82	< 0.0002	<u> </u>	9	4 1 62	< 0.0002	<u> </u>	) 0	< 1.62	< 0.0002		0		< 4 85	< 0.0007
CE-00019	603 W. 10th St	House	Basement	Azt	Indoor	Stationary	Field Sample	N/A	2569	12/16/2003	<del></del>	ļ <u></u>	0	< 1.65	< 0.0002	<u> </u>		4 1.85	< 0.0002	1 9	0	< 1.65	< 0.0002	[-—— <i>-</i> —	•		< 4.95	< 0.0007
CE-00020	603 W. 10th St	House	Besement & ground floor	Dual	Horizontal auriace & high traffic area		Field Sample	N/A	400	12/16/2003		0	0	< 521.49	< 502	٠		< 521,49	< 502	<u> </u>	<del>'</del>	< 521.49	< 502				c 1,584.48	c 1,506
CE-00021	603 W. 10th St	Heuse	Shoulder	Air	Indoor	Personal	Field Sample	N/A	1908	12/17/2003		<u> </u>	<u> </u>	< 1 55	< 0.0003	<del></del> -	9	< 1.55	< 0.0003	ļ <u>.</u>	9 0	< 1.55	< 0.0003		0.		< 4.65	< 0.0000
CE-00022	603 W. 10th St	House	Basement	Air	Indoor	Stationary	Fled Sample	N/A		12/17/2003	<del></del>	<del>}</del> 9		< 1.62	< 0.0002	<del> </del>	<del>'                                     </del>	< 1.62	< 0.0002	<del></del>	· · · · · ·	< 1.62	< 0.0002	I	0	_	< 4.85	< 0.0007
CE-00023	603 W. 10th St		Living room	Air	Indoor	Stationary	Field Sample	N/A	2495	12/17/2003	<u> </u>	0		< 1.62	< 0.0002	<del>                                     </del>	<u> </u>	< 1.62	< 0.0002	<del>  •</del>	0	< 1.62	< 0.0002		- 0		< 4.85	< 0.0007
CE-00073	616 Wisconsin Avo 816 Wisconsin Ave	House	Basement		Indear	Stationary	Fred Sample	N/A	6145	1/17/2004	<b>⊢</b> —	- 0	9	< 2.35	< 0.0001	<del>                                     </del>		< 2.35	< 0.0001	<del>                                     </del>	9	< 2.35	< 0.0001		0		< 7.05	< 0.0004
CE-00074		House	Ground lave! Living room	Atr	Indoor	Stationary	Field Sample	N/A	6272	1/17/2004	<b></b>	! 9	0	< 2.42		<del>                                     </del>		< 2.42		<u>ئ</u> ىپ			< 0.0001		<u>_</u>		< 7.27	< 0.0004
CE-00075	616 Wisconsin Ave	House	2nd level hallway	Air	tratoor	Stationary	Field Sample	N/A	6231	1/17/2004	-	<del>- :</del>	-	< 2.42	< 0.0001	ي	- 9	< 2.42	< 209	<del> </del>	1 -	< 2.42 < 325.83	< 209				< 977.80	< 627
CE-000/6	520 Utah Ave	House	Basement, ground floor, second tavel [Living room	<u>Dust</u>	Horizontal surface & high traffic area	Etal'anna	Field Sample	N/A	600	1/17/2004	<del> </del>	1 -	- 0	< 1.55	< 0.0001	+ -	<u> </u>	< 325.90 < 1.55	< 0.0001	٠ - ١	1	< 325.93	< 0.0001		- 4	-	< 4 65	< 0.27 < 0.0003
CE-00025	620 Utah Ave	House	West Bedreom 2nd isvel		Indoor	· · · · · · ·	Field Sample	_	6074		<del> </del>	1 4	,	< 2 21	< 0.0001	<del>                                     </del>		< 2.21	< 0.0001	₩,		< 2.21	< 0.0001		— <del>-</del>		< 6.64	₹ 0.0004
CE-00029	520 Utah Ave	House	Ground floor, second level HS/HTA	Dust	Indicor	Stationary	Field Sample	N/A N/A	6073	1/8/2004			<del>!</del>	< 280.75	₹ 251	<del></del>	<del>]</del>	< 260.75	< 251	<del>                                     </del>	1 0	< 280.75	< 251	<del>                                     </del>			< 782.24	< 753 < 753
CE-00063	853 Flower Creek Rd	House	Ground level hallway	Air	Horizontal surface & high traffic area	Stationery	Field Sample Field Sample	N/A	400	1/8/2004	-			< 2.35	< 0.0001	<del> </del>	<del>'  ' </del>	< 2.35	< 0,0001	+ ;	<del></del>	< 2.35	< 0.0001			_	< 7.05	4 0.0004
CE-00084	653 Flowe: Creek Ad	House	Basement-center	Air	Indoor						<del> </del>	1 2		< 2.35	< 0.0001	<del>  `</del>	3 4	< 2.35	< 0.0001	<del></del>	1 -	2.35	< 0.0001				₹7.05 ₹7.05	40 0004
CE-00069	653 Flower Creck Rd	House	Basement, ground Cool	Dust	Horizontal austace & high traffic eran	Stationary	Field Sample Field Sample	N/A N/A	6186	1/16/2004	<del> </del> -	<del>                                     </del>	<del></del> ;	< 372.50	< 359	┿╌	<del>                                     </del>	< 372.50	< 359	1 0	1 6	< 372.50	< 358				<11.117.49	₹ 1,070
CE-00070	853 Flower Creck Rd	Blank	NA	Dust	MAY	<del>  </del>	Field Blank	N/A	400	1/16/2004	<del> </del>	<del>}                                 </del>	1 ,	< 52.15	- C13389	┵	1 3	< 52.15	2 935	<del>)                                    </del>	1 - 1	7 < 52.15	1 100	<del> </del>	—- <u>-</u> ,		< 158.45	11,979
CE-00030	713 Michagan Ave	House	Kitchen		(ndoor	Cretioner	***		6197	1/12/2004	<del> </del>			< 2.35	< 0.0001	+	- 0	< 2.35	4 0.0001	1 2	1 0	₹ 2.35	< 0.0001				<17.05	< 0.0004
CE-00031	713 Michigan Ave	House	2nd favet east more		Indoor	Stationary Stationary	Field Sample Fletd Sample	N/A	6127)		<del> </del>	<del></del> -	·····	< 2.35	4 0,0001	┿	<del></del>	< 2.35	< 0.0001	1 - 3	1 - 3	42.35	< 0.0001	<del></del>	<del> ×</del>		< 7.05	< 0.0004
CE-00034	713 Michigan Ave	House	Ground Goor, second level	Qual	Horizontal surface & high traffic area	PHENNERA	Field Sample	N/A	400		<del> </del>	<del>  - "</del>	-	< 434.58	< 418	<del>                                     </del>	9	< 434.58	< 418	<del>\ _</del> ^	<del>]</del>	< 434.68	< 418	<del>                                     </del>			< 1,303.74	< 1,255
CE-00092	66 Palipa Dr		Office	Air	Induce	Chefianne	Field Sample	N/A	6556		<del> </del>	1 .		< 2.50	< 0.0001	1 .	- 4	₹ 2.50	< 0.0001	1 -	1 0	<12.50	< 0.0001		- 0		<17.50	< 0.0004
CE-00083	86 Paliga Or	House	Living room	Air	Inden	Stationary	Field Sample	N/A	6556	1/23/2004	<del></del>	<del></del> - <del>-</del> ×	1 2	< 2.50	< 0.0001	+	<del>}  </del>	< 2.50	< 0.0001	1 7	1 0	< 2.50	< 0.0001	<del></del>			₹17.50 ₹17.50	< 0.0004
CE-00095	86 Paliga Or	House			Manager and and an & high leading and	OHOROMETY			400		<del> </del>	<del>                                     </del>		< 325.93	< 314	<del> </del>	<del>1 - 1</del>	₹ 2.50 ₹ 325.83	< 314	+	1 -	₹ 325 93	< 314		<del> </del>		< 927.80	< 941
CE-00083	leo canda ni	MOUSE	Basement, ground floor	I DUBI	Horizontal surface & high traffic area	<u> </u>	Field Sample	N/A (	400	1/23/2004		<u>, u</u>	1 0	( <  323.83	41314	1	7 E)	< 323,63	2314	<u>,                                    </u>	<u> </u>	- 4 TES 20	1 4 314		v	· •	c1511100	

Samples with LA detected

113 W. Oak St - each of two ambient air samples (CE-00087 and CE-00088) had detects of one structure, both with LA concentrations of 0.0001 S/cc each.

- 143 Crossway Ave one ambient air sample (CE-00005) had a detect of one structure with a LA concentration of 0.0001 S/cc. Remodeling activities were occurring in this home during CE sample collection.
- 405 Farm to Market Rd one ambient air sample (CE-00056) had a detect of one structure with a LA concentration of 0.0002 S/cc.

All other samples were nondetect for LA, chrysotile, and other amphiboles.

#### 3.3.2 Personal Air Sample Results

Of the 8 personal air field samples collected during the CE activities, one sample (CE-00016) collected at 2293 Kootenai River Rd showed one structure of LA (at a concentration of 0.0001 S/cc). Remodeling activities were occurring in this home during CE sample collection. All other samples were nondetect for LA, chrysotile, and other amphiboles.

#### 3.3.3 Dust Sample Results

All of the 32 dust field samples collected were nondetect for LA. One sample (CE-00125) collected at 1108 Louisiana Ave showed a chrysotile concentration of 4,685 S/cm<sup>2</sup>. Chrysotile contamination is not a result of the presence of vermiculite at a property.

#### 3.3.4 Quality Control Sample Results

As stated in the Final SAP Addendum, Post Clean-Up Evaluation Sampling (CDM 2003), quality control requirements detailed in Section B5 of the Phase 1 QAPP (EPA 2000) were to be followed for air samples collected during the CE activities. These requirement require the collection of replicate air samples at a rate of 1 per 20 (5%), and the submission of field blanks at a rate of 1 per 20 (5%). As stated in the CE SAP (CDM 2003), no quality control (QC) samples were required for dust samples collected during the CE activities.

A total of three replicate air samples (all nondetect for LA) were collected during the CE sampling. This resulted in a collection frequency of 4.5%. This is 0.5% less than the 5% frequency called for in the SAP. While the collection frequency of 5% was not met, given the low number of samples with detects of LA and that the same volume of air was collected between each replicate and its parent sample, this deficiency in replicate collection frequency will not affect the quality of the data collected.

As detailed in Libby Field Office Record of Modification Forms LFO-000064a and 64b, the frequency of QC sample collection was changed to the following requirement:



One field blank was collected at a frequency of one per team per day and analyzed at a frequency of one per team per week for each media. Those field blanks collected but not submitted for analysis were placed into archive.

A total of six field blanks were analyzed (three for air sampling and three for dust samples). LA was not detected in any of the blank samples collected.

#### 3.3.5 Overview of Results

A total of five air samples (collected from four different properties) showed detects of one LA structure each, with concentrations ranging from 0.0001 to 0.0002 S/cc. Below a brief summary of the samples with LA detects, by sample type, is shown.

Type of Sample	Total Number of Samples Collected	Number of Samples With LA	Percentage of Samples With LA	Concentration Range of Samples With LA
Ambient Air	66	4	6.1%	0.0001 S/cc to 0.0002 S/cc
Personal Air	8	1	12.5%	0.0001 S/cc
Dust	32	0	0%	NA
Total	106	5	4.72%	



# Section 4 References

AHERA. 2002. Asbestos Hazard Emergency Response Act 40 CFR, Chapter 1, Subchapter R, Part 763, Subpart E, Appendix A. Federal Register 2 FR 41846, October, 1987. Data current as of the Federal Register dated May 2002.

CDM. 2003. Final Sampling and Analysis Plan Addendum, Post Clean-Up Evaluation Sampling. December.

\_\_\_\_ and Syracuse Research Corporation (SRC). 2003. Sampling and Analysis Plan for Indoor Dust, for use at the Libby, Montana, Superfund Site, Revision 0, Version 2. August.

EPA. 2000. Sampling and Quality Assurance Project Plan Revision 1 for Libby, Montana, Environmental Monitoring for Libby Amphibole (LA) Asbestos, Baseline Monitoring for Source Area and Residential Exposure to Tremolite-Actinolite Libby Amphibole (LA) Asbestos Fibers. January.

International Organization for Standardization (ISO). 1995. Ambient Air – Determination of Asbestos Fibers – Direct Transfer transmission Electron Microscopy (TEM) Method ISO 1031:1995(E).



# Appendix A Post Clean-Up Evaluation Sampling Field Paperwork

/0030**5** 



## **TRANSIT**

All-Weather Notebook No. 301

Linhu Asbestos Project Post Cleanup Evaluation 12-15-03 to 1/2016

4 5/8" x 7" - 48 Numbered Pages

Rite in the Rain ALL-WEATHER WRITING PAPER

Libby Asbestos Project CDM/Mactec Contractor Logbook

Return to: Dave Schroeder . 318 Louisiana Avenue Libby, MT 59923 406-293-8595

#### Every Page:

- > Initial and date all pages
- > Sign and date last entry of the day
  - > Line out once, initial and date all changes
  - > NO blank lines

#### Daily Entries:

- > Author
- > Date/Time
- > Weather
- > Activities
- > Persons on team
- > Level of PPE
- > Title of governing document
- > Serial numbers of equipment

#### CONTENTS

PAGE	HEFERENCE	DATE
2-3	1109 Louisiana Ave Allen	12/15/03
4-5	1106 Utah Ave England	12/16/03
326	178 Scenery Rd- Nelson	12/17/03
8-9	450 Form To Market Rd- McCilly	12/18/03
	52 Peuil St.	1/16/04
12	616 Wisconsin Ave.	1/17/04
	113 W. Oak St.	1/21/04
	2129 Hay 2 South	1/23/04
18	123 Humman Ave.	1/27/04
	PCE Envisorent List	<u></u>

Clear Viny) Protective Slipcovers (flem No. 30) are available for this style of notebook. Helps protect your notebook from wear & tear, Contact your deater or the J. L. Darling Corporation.

# 450 Farm to Market Rd

BD#_002514
------------

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100305 F	Page No.: <u>8, 9</u> Site Visit Date:	12/18/03
Address: 450 Farm	to Market Structure Description	on: House
Occupant: Wernon McCo		ne Number:
Owner (if different than occupant): NA	_ \	ne Number: <u>////</u>
Business Name: NA		
Sampling Team: Shown Cliv	eiva.	
Field Form Check Completed by (100% o	f forms): Kuguy farm	
	T	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) D	Date Removal Completed: <u>/0/03</u>
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other:	~
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	None Other:	-
Interior cleaning conducted during removal	Yes No	
	If Yes, which floors:	-
·	Basement Ground Second	
·   •	Garage Attic Other:	_
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	-
	Stockpile (Yard) None	<u> </u>
	Other:	
Location of vermiculite remaining outdoors	Oriveway Flowerbed Garden	
· ,	_Stockpile (Yard) None	
	Other:	
	_ * :	

Data Item	. Value	Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately  1 to 2 months  3 to 4 months  5 to 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  More than once a week  Twice a month  Less than once a month  Other: Does not like vaccom.	Difficult for hundicapper people to use.
Heating Source	Wood/Coal Electric Propane/Gas Other:	
Heat Oistribution .	Forced air Radiant Other:	
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	UNKNOWN
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes - No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	NA	To be completed by field personnel:  Oo these properties currently have indoor or outdoor vermiculite?
Addresses or names of business where occupants work	Retired.	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
DDITIONAL INFORMATION	<u>-</u>	

Sheet No.: D- 000091

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Logbook No: _/	00305 Page No:	Sampling Da	le: <u>12/18/03</u>
dusiness Name: NA		_ Owner/Tenant:Verac	211 Macally
Land Use: Residentia		l Mining Roadway	Other ( )
		_ Names: <i>Shows Oli</i>	
Sampling reall. MAC		_ Maines Suzusa Cit	verra
Data Item	Solalis Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00058		
Location ID	BD-002514		
Sample Group (circle) (Subgroup of the property)	Garage. House Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garaga Aouse, Shed, Pump Cose Other
Location Description (circle) (Detailed description point within	Basement Ground Floor Second Level Other	Basement, Ground Noor) Second Level Other	Basemen Cound Floor, Second Level Other
Matrix Type (circle)	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Treas Other
egory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field black) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 20 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm _	25mm / 37mm	25mm 3 mm
Pore Size (circle)	TEM45 -PCM- 0.8	TEM45 PSM- 0.8	TEM45 POM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA	Rotometer Ory-Cal NA
Pump ID No.	00613	1,12	
Flow Meter ID No.	B-1610 5-1521		
Start Time (1911)	1814 1817	1830	
Start Flow (L/min)	2.0 2.0 20		
Stop Time	1813 1816 1819	1822	
Stop Flow (L/min)	2.0 2.0 2.0		
Pump Fault? (circle)	(No Yes	No Yes	No · Yes
Field Comments	100 cm² Crownel level frontentrance carpet	100 cm² Basement tile floor, bottom of	100 cm²
Cassette Lot Number:	· carpet 100 cm² Cround level · backentrance · langer	100 cm <sup>2</sup> Basement tile floor, bottom of 100 cm <sup>2</sup>	100 cm <sup>2</sup>
	100 cm Groundlevel horizontal surfaces	100 gm² () x (1000)	100 cm <sup>2</sup>
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated

000171

\_Sheet No.: SA-\_\_

	ELD SAMPLE DATA S		
Eield Logbook No:	100305 Page No: _ Farm to Market	Sampling C	Date: 12/18/03
ress: <i>450</i> /	Farm to Market	Owner/Tenant: <i>Vبي</i> ر	non McColly
Business Name: N.		int Minima Dandway	Others ( )
Land Use: CResiden Sampling Team: MA	CTEC CDM Other	,	
Camping reals. WA			<i>LETT</i> <b>L.</b>
Data Item	50 13 19 03 Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00056		
Location ID	BD-002514		
Sample Group	House		
Location Description	Hallway connecting Living room a bedream	100	
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB (lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	-Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
ow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	08911		
Flow Meter ID No.	95356-3		[ ]
Start Date	12/18/03		
Start Time	836 😕	-	
Start Flow (L/min)	9,21		
Stop Date	12/18/03	8	
Stop Time	1952 - 5	0	-
Stop Flow (L/min)	9.21	W	
Pump fault? (circle)	(No) Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Glear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments  Cassette Lot Number:	- Joan o Joan Cary		0.000
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team) // // Entered (LFO) // )	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: — Validated
· · · · · · · · · · · · · · · · · · ·			

For Field Team Completion
(Provide Initials)

Completed by

QC by

Sheet No.: SA-\_\_000184

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No:	100305 Page No: _ O Farm to Market	8 प Sampling [	Date: 12/18/03
Pusings Name: 410	O Farm to Market	Owner/Tenant:Ver	non McCully
Business Name: 114 Land Use: Residen		ial Mining Roadway	Other ( )
	CTEC CDM Other	•	` ,
Data Item	Cassette 1	Cassette 2	Cassette 3
la da u ID	<del>-</del> /	<del>\</del>	
Index ID	CE- 00057		-
Location ID	HOUSE 5012/19	103	·
Sample Group	House		
Location Description	Rasement	553	
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS F8-(field blank) (B-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor- ONA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm W	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
How Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0387	7	
Flow Meter ID No.	95356-3	<u> </u>	
Start Date	12/18/03		
Start Time	839	<b>)</b>	
Start Flow (L/min)	9.21	<u></u>	
Stop Date	12/18/03	<i>a</i> ;	
Stop Time	1954 - 5	0	
Stop Flow (L/min)	9.21 5	3	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	Pre . Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear  2 <sup>nd</sup> Clear VA
Field Comments			
Cassette Lot Number: 324/5	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

Nolpe/EPA Author: Shawn Oliveira Activity: Post-Cleanup Evaluation Sampling at 450 Farm to Market Rd BAt Stationary Air and Dust Samples will be collected per SAP Addendum, PCE Sampling, CSS, 12/1/03. Dry Cal B-1610, 5-1521 used to calibrate Low Volpump for Dust Samples. Equipment Ref pa 48 of this book. 826 Arrive onsite. McColly's present. 836CE-00056 placed on Pump , precalibrated, and started. Ref FSDS 51-000171 839CE-00057 placed on fump pre-calibrated, and started Ref FSOS 5A-000184. 853 Depart site: 1133 Arriveonsile, perform Floward fitterchecks on CE-0056,57. Allok.
1146 Depart sik. 50 1440 Arrive onsite, resident not home unable To perform flow + filter checks. 1802 Arrive at site, perform flow and filter checks on CE-00056,57. Allok. 1822 Dust Sample CE-00058 collected, capped and sealed. Ref. FSDS-D-000091. 1828 Complète PI.F.

Vernon McCully Author: Shown Olivera 12/16/009 Polpe/EPA Post Clean up Evaluation Sampling. 1946 Arrive at site, Complete Residential Activity. 1952 CE-00056 stopped, postcalibrated, and scaled Ref. FSDS SA-000171. 1954 CE-00057 stopped, post-calibrated, and sealed, Ref FSDS 5A-000184. 2002 DCON Equipment, bag up PPE. 2014 Departsite

## 2293 Kootenai River Rd

BD# 60.000785

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100301	Page No.:/8-26 Site Visit Date: /2	115/03
Address: 2293 Kootenai	River Rd. Structure Description	House
Occupant: Mike Powers	Phone	Number: <u>293-9285</u>
Owner (if different than occupant):	Phone	Number:
Business Name: WIA	·	
Sampling Team: PARANA		
Field Form Check Completed by (100% of	of forms): 0 P5	<u> </u>
<u></u>	\	<del></del>
. Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: 10/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
ĺ	Crawl Space Basement Sub-floor	
	Other:	
Location of vermiculite remaining indoors	Attic (Walls (interior or exterior)	
		[ ]
	Crawl Space Basement Sub-floor	}
	None Other:	
Interior cleaning conducted during removal	Yes No	]
	If Yes, which floors:	
	Basement Ground (Second	}
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	Parture - Cellur
	Stockpile Yard None	Pasture - Cellur Burn - Pump hous
•		Bunkhouse Carger - Cottage
	Other:	Carger - Coffage
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	·
· -	Stockpile (Yard) None	~
	Other:	<del>-</del>
	<u> </u>	

Data Item	Value	Notes
Pre-Sampling Interview (To be complete	ed with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
	Immediately  3 to 4 months  5 to 6 months  more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month  Once a month  Less than once a month  Other:	Used it for about a week Then ER removed.
Heating Source	Wood/Coal Electric Propane/Gas Other: Fuel 0.1	
Heat Distribution -	Orced air Radiant Other:	
How soon after the removal was a forced air heating source first used?	3 to 4 months 5 to 6 months more than 6 months	
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Remodeling
Addresses of other homes or properties where the occupants visit and may contain vermiculite	3/3 Californiu	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?  Vcs - Parking arca - walls
Addresses or names of business where occupants work	Naturally Good Things 313 California	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
	108 E. 444 St. Suite 3	<u>-</u>
ADDITIONAL INFORMATION	- <del></del>	

Sheet No.: D-  $\frac{000056}{}$ 

# LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Field Logbook No: /	2030   Page No: 9	Sampling Da	te: <u>///20/03</u>	
	ootenti River Kd.	Owner/Tenant: Mike A	owers	
Business Name:	4		<b>*</b> ***********************************	
Land Use: Residentia		•	Other ( )	
Sampling Team: MAC	TEC CDM Other	Names: PARANH	1 1140/13	
Data Item	Cassette 1	Cassette 2	Cassette 3	
Data item	Cassette	Cassette 2	7 Casselle 3	
Index ID	GE 00001		<i>†</i> /	
	CE- 00001	· <del> </del>	<del> </del>	
Location ID	BD-000785			
Sample Group (circle)	Garage, House, Shed,	Garage, House, Shed,	Garage, House, Shed.	
(Subgroup of the property)	Pump House	Pump House	Pump House	
	Other	Other	Other 3/a Nic	
Location Description	Basement, Ground Floor,	Basement, Gound Floor,	Basement, Ground Floor,	
(circle)	Second Level	Second Level	Second Level	
(Detailed description point within the location)	Other	Other	Other 6 1120 6.3	
wic issuiding	Horizontal Surfaces	Horizontal Surfaces	Horizontal Surfaces	
Matrix Type (circle)	High Traffic Areas	High Traffid Areas	High Traffic Areas	
	Other	Other	Other_N/A	
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS F8-(field blank) LB-(lot blank)	FS B-(field blank) LB-(lot blank)	
Sample Area (cm²) (circle)	100 200 300 NA	100 / 200 300 NA	100 200 300 NA	
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm	
Pore Size (circle)	TEM45 PCM- 0.8	TEM- 45 PM-0.8	TEM45 PCM- 0.8	
Flow Meter Type (circle)	Rotometer (Dry-Cal) NA	Rotometer Printal & BA	Rotomeler Dry-Cal NA	
Pump ID No.	612058	612058	NA	
Flow Meter ID No.	B1610 51521	81610-51521		
Start Time	1333 1337 1340	/343		
Start Flow (L/min)	2.0 2.0 2.0	7.0		
Stop Time	1335 1339 1342	1345		
Stop Flow (L/min)	7.0 2.0 2.0	2.0 2 - Pulede	<b>3</b>	
Pump Fault? (circle)	(No) Yes	No Yes ·	No. Yes	
Field Comments	100 cm2 - Diwing Koom Floor	100 cm²-Kitchen-top of refridgerator	100 cm <sup>2</sup>	
Cassette Lot Number:	100 cm² - Kitchen Floor	100 cm <sup>2</sup>	100 cm²	
<u> 1380 2</u>	100 cm²-Dining Room Window sill	100 cm <sup>2</sup>	100 cm <sup>2</sup>	
·	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	
Entered (LFO) TC	Volpe: Entered Validated	Entered Validated	Entered Validated	
	··			

For Field Team Completion	Completed by M.O	QC by 20
(Provide Initials)	Completed by 71	GC 09 50

Sheet No.: D- 000057

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Field Logbook No: /			age No:	سي ا	S	ampling Da	te: ///20	03	<del></del>
Business Name:		Ku	er Kell	_ Owne	r/Tenant:	Mike	ELVECS	<u> </u>	
Business Name: Nam	1/A 30 Sal	nool ·	Commercia		ina C	Panduna	Othor (		
Sampling Team: MAC					ing F : <b>PAR</b>	Roadway	Other (		)
Sampling Team. WAS	<u></u>	<del>20/03</del>	=1 <u></u>	_ 14011163					<del></del>
Data Item		Casset	te 1		Cassett	te 2		Cassette	3
	<b>7</b>		-						
Index ID	CI	<u>E- 000</u>	02			7_			7
Location ID	<del></del>	0007				, 			·
Sample Group (circle)	- '	House S	hed,	-	House, S.	heđ,	1 *	louse, Shed	1,
(Subgroup of the property)	Pump Ho			Pump He	ouse/		Pump Hou	se /	
	Other			Other	<del>-/</del>		Other		<del></del>
Location Description	Basemer	Ground	Floor	Baseme	nt/ Ground	floor,	Basement,	Ground FI	oor,
(circle)	Second t	eve		Second	-evel		Second Le	vel /	
(Detailed description point within the location)	Other		<del></del>	Other	<del> </del>	<del></del>	Other		
-	Horizonta	al Surfaces	>	Horizon	al Surfaces		Horizontal	Surfaces	
Matrix Type (circle)		ffic Areas		1 _ T	ffic Areas		High Traffic	: Areas	
	Other			Other			Other	1	<del></del>
egory (circle)	FS FB-(	field blank)	LB-(lot blank)	FS FB-	field blank)	LB-(lot blank)	FS FB-(fie	ld blank) LB	-(fot blank)
Sample Area (cm²) (circle)	100	200 3	(600)	100	200 3	00 NA	100 20	300	NA
Filter Diameter (circle)	25mm	37m		25mm	37m	m	25mm	37mm	
Pore Size (circle)	TEM45	) PCN	1- 0.8	TEM45		0.8	TEM45	PCM-0	.8
Flow Meter Type (circle)	Rotomete	r Ory-	Cal NA	Rotomete		24/20/ 63 2	Rotometer	Dry-Cal	NA
Pump ID No.	Co	12058		6	2058				
Flow Meter ID No.		1051		1	610-5	7521			
Start Time -	1355	/357	1403	1407	1416	-7	1		
Start Flow (L/min)	2.0	2.0	2.0	2.0	2.0	<del> /</del>		· ·	
Stop Time	1357	1401	1405	1409	14/3	-	1/24/+3		
Stop Flow (L/min)	7.0	٥.5	ن.چـ	2.0	2.0	12-191	<del>                                     </del>	<u>                                     </u>	
Pump Fault? (circle)	<b>№</b>	Yes		No.)	Yes		No	Yes	·
Field Comments	100 cm² -	Basem the I f	ent	ON WI	Gronn vdom s shed re		100 cm²		
Cassette Lot Number:	100 cm² • \$ /00/ ( \$ \$ e p :	Baser Baser Base	nead of level visushed	100 cm <sup>2</sup> +	and le	relon ststeps	100 002	11/2	0/03
	NOOM				dose		100 cm²		
internal (1 50) - TO		nk (circle):	_		nk (circle):		Archive Blank		
intered (LFO) 1C	voipe: Ent	tered	validated	Entered _	Valid	ated	Entered	validate	a

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For Field Team Completion	Completed by 9V	QC by	
(Provide Initials)	Completed by	QC by	RD

Sheet No.: SA-

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100301 Page No: 18-20 Sampling Date: 12/15/03 ress: 2293 Kootenai River Rd. Owner/Tenant: 10wers Business Name: A/A Land Use: Residential School Commercial Mining Roadway Other ( PARANA Sampling Team: MACTEC (CDM) Other Names: Data Item . Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00013 Location ID 30-000785 Sample Group Location Description Category (circle)-FS)FB-(field blank) L8-(fot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) Matrix Type (circle) Indoor Outdoor NA Indoor Outdoor Indoor Outdoor NA 25mm Filter Diameter (circle) 37.mm 25mm 37mm 25mm 37mm Pore Size (circle) PCM- 0.8 TEM- .45 TEM- .45 PCM- 0.8 TEM- .45 PCM- 0.8 Rotometer ow Meter Type (circle) DryCal NA Rotometer DryCal NA Rotometer DryCal NA Pump ID Number 92045-1 Flow Meter ID No. 12/15/03 Start Date 929 Start Time 4.09 Start Flow (L/min) 12/15/03 Stop Date 1940) Stop Time 3.90 Stop Flow (L/min) No Pump fault? (circle) Yes NA Nο Yes NA No NA Yes MET Station onsite? No NA No NA Yes NA No Yes Yes Sample Type Pre Post Clear Pre -Post Clear Pre Post Clear-2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA Field Comments Cassette Lot Number: 32415 Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes

	<del>,</del>	<del>, </del>
For Field Team Completion	Completed by •	QC by •
(Provide Initials)	Completed by 4	GC 59 · _

Volpe:

Entered

Validated

Volpe:

Entered

Validated

QC (Field Team)

Volce:

Entered

Validated

LIBBY FIELD SAMPL	E DATA	SHEET (FSDS	) FOR STATI	ÒNARY AIR
eld Logbook No: /00.30/			Sampling Date:	

Field Logbook No:	/0030/ Page No:_	Sampling D	Date: <u>/2//5/03</u>			
Iress: <u>2293</u>	dress: 2293 Kootenui River Rd. Owner/Tenant: Buers					
Business Name:						
Land Use: Residen		•	Other (			
Sampling Leam: MA	CTEC CDM Other	Names: PARANA				
Data Item	) /2/15/03 Cassette 1	Cassette 2	Cassette 3			
Index ID	CE- 00014					
Location ID	BD-000785					
Sample Group	House					
Location Description	Living Room Unfinished					
	Untinished					
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)			
Matrix Type (circle)	(Idoo) Outdoor NA	Indoor Outdoor NA	Indoor Outdoor - NA			
Filter Diameter (circle)	(5mm) 37mm	25mm 37mm	25mm 37mm			
Pore Size (dirde)	TEM- 45 CM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8			
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA			
Pump ID Number	2140					
Flow Meter ID No.	92045-1	·				
Start Date	12/15/03		- <u>-</u>			
Start Time	0933					
Start Flow (L/min)	4.09					
Stop Date	12/15/03					
Stop Time	1942	•				
Stop Flow (L/min)	4.09		<u> </u>			
Pump fault? (circle)	(No Yes NA	No Yes NA.	No Yes NA			
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA			
Sample Type	Pre Post Clear -2 <sup>nd</sup> Clear NA	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA			
Field Comments	609mm x 4.09 L/min	a 0.001 0 0.001 (4)				
_	=24911					
Cassette Lot Number:	- <del></del>		·			
<u> 32415</u>	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No			
QC (Field Team) 10 Entered (LFO) 33	Volpe: Entered Validated	Volpe: Entered Validated :	Volpe: Entered Validated			
Lintered (LFO)	Likeled validated	validated	Validated			

For Field Team Completion		Completed by N		QC by	
(Provide Initials)	_	Completed by •	:	1 40 5,	

Sheet No.: SA-000150

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100301 Page No: 18-20 Sampling Date: 12/15/03

Pess: 2293 Kootenai River Rd Owner/Tenant: 18wers Jusiness Name:\_ \_ ✓ / 🖊 Land Use: (Residentia) School Commercial Mining Roadway Other ( Sampling Team: MACTEC (CDM) Other \_\_\_\_\_ Names: PARAN A Data Item Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00015 Location ID BD-000785 House Sample Group N.W. Bedroom Location Description Category (circle) B-ffield blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) Matrix Type (circle) Indoo Outdoor NA indoor Outdoor indoor Outdoor - NA NA 25mm) 37mm 25mm 25mm 37mm Filter Diameter (circle) 37mm Pore Size (circle) (PCM- 0.8) TEM- .45 TEM- .45 PCM- 0.8 TEM- .45 PCM- 0.8 Rotometer Tow Meter Type (circle) DryCal NΑ Rotometer DryCal NA Rotometer DryCal NA Pump ID Number 92045-1 Flow Meter ID No. 1 12/15/03 Start Date Start Time 0936 4.09 Start Flow (L/min) 12/15/03 Stop Date 945 Stop Time 4.29 Stop Flow (L/min) . Yes Pump fault? (circle) 40) NΑ NA NA Nο Yes No Yes No NA No NA Na NA MET Station onsite? Yes Yes : Yes Pre Post Clear Pre Post Clear Pre Post Clear Sample Type 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 609minx 4.1927min Field Comments = 1×13 25522 7712/15/03 Cassette Lot Number: 32415 Archive Blank (circle): Yes No Archive Blank (circle): Yes Archive Blank (circle): Yes No. QC (Field Team) 17 Völpe: Volpe: Volpe: Entered (LFO) 10 Entered Validated Entered Validated Entered Validated

For Field Team Completion	Completed by		QC by*
(Provide Initials)	p +10+ +1	·	

000034

Sheet	No:	PA-

## LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

Field Logbook No: 1	0030 / Page No: _	18-20 Sampling [	Date: /2//5/03
_	Kootenai River Re	Owner/Tenant: 1600	7.5
ousiness Name:		·	
Land Use: Residen		<u> </u>	Other ( )
Sampling Team: MA	CTEC CDM Other	Names: PARANA	
Person Sampled:	SOLOGIAL POWERS SNN:	0955 Task: 1654 (166	in Up Evaluations
Data Item	10/2/15/48 <b>3</b> ette 1	Cassette 2	Cassette 3
Index ID	CE- 00016		
Location ID	BD-000785		
Sample Group	House		
Location Description	Shoulder		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	(Indoor Outdoor	Indoor Outdoor	Indoor Outdoor
Filter Diameter (circle)	25mm 37mm	25mm . 37mm	25mm 37mm
re Size (circle)	TEM45 PCM- 0.8	TEM- ,45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotomete DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	612058	666248	
Flow Meter ID No.	92045-1	92045-1	
Start Dâte	12/15/03	12/15/03	
Start Time	0956 1304	/527	
Start Flow (L/min)	3.11 3.11	3.//	
Stop Date	12/15/03	12/15/03	
Stop Time	1360 1503	1935	
Stop Flow (L/min)	3.1/ 3.1/	3.11	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA ,
MET Station onsite?	No Yes NA -	No Yes NA	No -Yes NA
Sample Type	TWA EXC NA	TWA EXC (NA)	TWA EXC NA
Field Comments  Cassette Lot Number:	303 min 164 min x 3.11 = 572 L 119 min x 3.11 = 370 L	-398L V=1340L	
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
UC (Field Team)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe:   Entered Validated
Entered (LFO)	CIKEIED	rurei ed Agilogren	Linesedvandated

For Field Team Completion	Completed by	QC by •
Provide Initials)	Completed by 4	1 GC by -

#### Residential Activity Log

Resident Address: 2293 Kootena; River Rd.
Volunteer Name: Mike + Georgine Powers
Sampling Date(s): 12/16/03
Personal air sample number (s): CE-00016
FSDS number(s): PA-000035, 5A-000159, 158

	Date/Time	Go Outside?	Pump problem?	General Activities	}
	Interval	<u> </u>			
	12/14/03	No Yes ( mins) Describe	Yes (describe)	Christman Bards	mike
	0800 - 1030	Describe		15 min changed fitters 15 min Changed fitters Vacual Reacher are 15 - 20 min	furine
	1030-11:15	MU		Nacumal Reause are 15-200	nedezo
l	1115- 11:30	No Yes ( mins) Describe	(No) Yes (describe)	4.33	mile
	14:30:-	no	No	Southern Wide	niko
Se bio	12:00 72:30	No Yes ( mins) Describe	Yes (describe)	The state of the s	Hourgine
o	12:30-2:00	20	no	Swipt Aliddle Floor Vaccumed Remodel-R	com
	2:00-2:20	Yes ( mins) Describe	Yes (describe)	Folded Clean Clothus	
	2:25-Stopped	-machine-	yes ->	Greg charged monitor	] -
	2:30-3:30	Yes (mins) Describe	No Yes (describe)	Wouked on Purustomes Cards	
	3:30 5:00	No	No	Ketcher work	
	5:00-130	Yes ( mins) Describe	No Yes (describe)	Mora Kitchen Would + Dinner	
	6.30 17.25	Vo	N & -	Christmas Cared	
	Note: Continue on se	cond page if necessa	ry.	,	

Gres 203-175

#### Residential Activity Log

Resident Address: 2293 Koofenai River RJ.
Volunteer Name: Mike - Georgine Powers
Sampling Date(s): /2/17/03
Personal air sample number (s): LE -00016
FSDS number(s): PA-00036, 5A-000166, 168, 169

Date/Time Interval	Go Outside?	Pump problem?	General Activities	Theo
182D- 090D	(No) Yes (mins)	(No) Yes (describe)	Mistin Carde	mes
	Describe	- 50 (50001150)	christmas lands	meo
19122-0940	(no).	(no)	areas magnitude be spranteen	e me to
	(yes) 1/2 MIN	to heed dady.	swept steps	<u></u>
0940-1100	Yes (mins) Describe	Yes (describe)	swept stairs to	mec.
1100-1110	yes 1-2 min	60	Had a Visitapere to v monte	mes
11:30-12:30	Yes ( mins) Describe	(No) Yes (describe)	Kitchen Words	
12:30-1:15	No	No.	Cleaned 60 hrosm of Rooms in basement	omin
1:30-2:00	No) Yes ( mins) Describe	Yes (describe)	Swept debies & nails	
200-215	10	(Nb)	phone o Changed - Clothes - Grage	emeout
Completed	No Yes ( mins) Describe	No Yes (describe)	Several to Wanter	
<u> </u>				
	No Yes ( mins) Describe	No — Yes (describe)		
_				

Note: Continue on second page if necessary.

A swept, with a Broom, all the shing surfaces cleaned by EHA, including encapsulated surfaces, ceilings misses of Page of Windaw glass & varnished with local Desired to the start of the surfaces.

2293 Kootenui River Rd. Location Mike Powers Date 11/20/03 Project Chent Post Clean Up Evaluation FIA Author: Gregory Parana In MACTEC Weather: 340F Wind Imph 5 = N Activity: 1) ust samples will be collected in the house (BD-000785). Dust surples will be collected in accordance with SAP Addendum, Post Clean. Go Evaluation Sumpling, CSS, Libby Ashestus Site, 044, 11/13/03. Deviations to Sections fulzolas Modifications to section 3.2.4 include 1) 2 dust samples will be collected in the house. 2.) House will be broken down into 2 arcas - Kitchen/dining room - Busement, Andlevel. Equipment: Dir Cel B161051521, Low vol. sampling pump, 6.45 Act um Dust sumple cassettes, begs, deconvipes, rox 10 cm 100 cm2 templates. 1100 Pump 612058 pre-culibrated with Dry Cal to 2.0 llmin a 318 Louisiana Ave.

Project/Client/Ost Clean Up Fraination EPA Anthor: Gregory Carana Lynd MACTEC 1300 Onsite. Mike powers present Mr. Pource Identified areas was noted. 1345 CE-00001 collected (DINING Room, Kitchen) Sample scaled 1418 CE - 00002 collected (Composite of busement, untinished ground level and untisished 2nd level. Sample scaled. Mike Powers left property. 1435 Offsite. Door locked. - 3 Sample pump decontuminated Ret FSDSD-000056,57. 1550 Samples relinguished to (DA Terry Crowell 1600) cut of logbook. 11/20/03

THE MEDICAL TRANSPORT OF THE MEDICAL PROPERTY OF THE PROPERTY

2293 Kootenai River Rd.

Location Mike Powers Dale 11/20/03

Location 2293 Kootenai Kiver Rome 12/15/03 Project / Client Post Clean Up Evaluation-EPA/Volpe Huthor: Gregory Brana Le com Activity: Personal and stationary air sampling will be conducted to complete the post clean up evaluation. Unst samples were collected on 11/20/03 (Retipss. 4-5) Sumpling will be conducted IAW SAPAddendum, (SS, PCE Sumpling 12/1/03. Equipment Refps. 6 of this Losbook. 0900 Orsite @ Naturally Good Thing. 0915 Onsite 2293 Kootenai River Rd. Mike fowers present, High vol samplings pumps started to warm-up. CE-00013 placed on pump 2141 and pre-culibrated. 0929' CE-00013' (Basement) started. CE-00014 (Living Room) placed on pump 2140 and pre-culibrated. 0933 CE-00014 started. - 0 and pre-calibrated \_\_\_\_ 0936 CE-00015 (N.W. Bedroom) started. PIF completed with Mike Powers. 0950 Georgine Powers onsite. 12/15/03

Powers
Location 2293 Kootenus RiverRed 12/15/031
Project/Client PCE - EPA/Volpe
Author: Cresory Parane 1-2. com

CE-00016 placed on pump 612058 and pre-culibrated. 0956 CE-00016 sturted. Place on Georgine Howers. She indicated that Mille Powers would also wear the pump throughout the day. The changes on who will be wearing the pump will be indicated on the Residental Activity Los. 1259 ONSITE 1300 CE-00016 stopped. Removed from Georgine and placed on Mike. Flowck-OK. 1300 CE-00016 started. - 2 1304 (E-00013 Alow CK-OK. 307 CE-00014 Flow CK. OK. 1315 to CDM Office. 1510 Recieved phone call from Mike had stopped running 1520 Owsite lump Buttery tault-303 minutes on counter CE-00016 post Calibrated on pump 612058.

recorderes 2293 Kootenai Kive Reloas 12/15/03 Grow to Client PCE - EPA-Volpe Author: Gregory Parana bys Com CE-00016 placed on pump 666248 and pre-calibrated. Sample placed ON Mike Powers. Expialis/03 1527 CE-00016 sturted. 1540 CE-00013 flower-OK. -1545 CE-00015 flowed-OK. 1548 offste 1930 Onsite. 1935 CE-00016 stopped-post calibrated and scaled in sample bug : 1940 CE-00013 stopped Post calibrated and secled in sample bas. 1942 CE-00014 stopped, Post calibrated and scaled in sample bis. 1945 CE-00015 stopped. Post culibrated and scaled in sample bas. Equipment wiped off and lefter site. 1950 Offsite to COM offices / 10/15/03. Samples locked in sample storage. RefESDS DA-000034, SA-000148, 149, 150 2030 Out of logbook. 115/03

Powers
Location 2293 Kootenal River Red Date 12/16/03
Project / Client PCE - EPA-Volpe
Author: Gregory Parana In 2 com

Activity: Day 2 of PCE sampling IN BD-000785 Kirsonal air samples will be collected on Mike and Georgine Tower and stateonary air samples will be collected on each level of the house. Sampling will be conducted IAW SAP Addendum, PCE Samoling (SS: 12/1/03. Equipment Ket. 15 G of this losbook 0755 Owsite. MP and GP present CE-00016 placed on pump 612058 92045-1. De la ded with Rotometer 0811 CE-00016 placed on MP started MP+GPINdicated that CE-00016 would be switched between the two over the sample period. I advised to write who was wearing the sample on the activity log. CE-00013 placed on pump 2141 and pre-calibrated. 0815 CE-00013 (Busiment) started.

Epocation 2293 Kootenai Kiver Kd Date 12/16/83 Anthor: Gerocy Parana OMITA CE-00014 placed on sump 2140 and pre-culibrated! -0817 CE-00014 started. (Living Kosm). CE-00015 placed on pump 2134 and pre-calibrated. 0819 CE-00015 started. 0820 Ottsite to 603 W. 10th St. 1115 Onsite. CE-00016 calck-OK 1126 CE-00015 stopped Re-calibrated. 1127 CE-00015 started. - 1 FE 1121 CE-00013 stopped- Re-culibrated 1122 CE-00013 started. - 3 5/12 CE-00014 stopped Re-calibrated 1125 CE-00014 started. \_\_\_\_\_\_ 1425 ONsite-Georgine indicated pump G12058 stopped. 370 minutes or counter will be used to calculate stop time. CE-00016 post-calibrated. CE-00016 placed or pump 626752 and calibrated, 1428 CE-00016 place on 6Pundstarted.

Project / Client PCE - Voloc (EPA Author: Gregory Tarana on CE-00013, 14, 15 flow ckd -OK Filter Chia-OK. 1435 Oftsite to 603 W. 10 +5+. - 1 1730 Orsite. Georgine weging filter flowick-OK Calek-OK for CE-00016. 1735 CE-00013 How ck-OK B 1737 CE-00014 flowck-OK Filteretok CE-00015 flowek-OK Filter CK-OK 1925 CE-00016 stopped, post calibrated and scaled in bas 1927 CE-00014 Stopped, postcalisatel and scaled in the has 1930 CE-00013 of speed, post calibrated and scaled in the bas, 1932 CE-00015 stopped, post calibrated and scaled. Offsite to COM Office. 1815 Samples locked in sample 5 faraje @ 318 Louisiano Ave. 4E) Recieved complete residential activity los from Powers - Allale

Location 2293 Kootenai River Relate 12/16/03 23

293 Kootenia River Rd. Location Powers .... One 12/17/03 Project Chant PCE - EPA - Vope Author Gregory Farma for B COM Activity: Personal and stationary air sampling will be completed for day 3 of the PCE. Sumpling will be conducted IAW SAP. Addendum (55, Post Cleun Up Evaluation Sumpling, 12/1/03. Egypment Reference py 6 of this losbook. 0800 Onsite Mike and Georgine Power present. CE-00016 placedon pump 626752 und pre-culibrated. 0810 CE-00016 placed on Wand started. CE-00013 placed on pump 2141 and pre-culibrated. ----0812'CE-00013 sturted. - ---(E-00014 placed on pump 2140 and starp12/17/03 pre-calibrated. 0814 CE-00014 started. ----CE-00015 placed on pump 2134 and pre-culibrated. 0815 (E-00015 sturted, Residential Activity los given to volunteer. 0820 Offsite to 603 W. 10 15t. 1100 Orside. (E-00016 flow Ck-016

Fiter Ck - 2 30% londed.

2293 Kootenui Ruc- Pd.

Location Powers Date 12/17/03

Project / Client PCE-EPA-Vo/pc

Huthor: Gregory Parana by DSDM

Mike powers indicated the he swept the upstairs and ground level construction area with a broom. 1112 CE-00013 stopped Re-calibrated. 1113 CE-0013 started. Filter ck-OK 1115 CE-00014 flow ck, Filterck-OK. 1312/1/00 14514c to 603 W. 10th St. (D) 1117 CE-00015 flow ck, Filter ck-OK. Offsite to GO3 W. 10th St. 1410 Orsite. Grucaring pump. She indicated the she swept the upstoirs and ground level construction arequith a broom! (E-00016 filter observed - Filter loaded. 1415 CE-00016 stopped, post calibrated and sealed. Stationary air samples will be stopped as well. 1421 (E-00014 stopped, postulibrated und scaled.

1423 (E-00013 stopped, postcalibrated and scaled.

12/17/03

2293 Kootenai River Rd Date 12/17/03 Econtion, Parers ..... Author: Gregory Parano Intle OM 1429 CE-00015 stopped, post culibrated and scaled. Equipment decon completed. Residential activity log received from Georgine Powers Offsite. Ref FSDS PA-00036, 5A-000166,168,169 -412/201

#### 113 W. Oak St

## LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

1 1	Page No.: /4-/5 Site Visit Date:/				
Address: 113 W. Ouk St. Structure Description: House					
Occupant: James - Tyson	Sanderson Phone	Number: <u>293-9795</u>			
Owner (if different than occupant):	/A Phone	Number:			
Business Name: N/A					
Sampling Team: PARANA		<u> </u>			
Field Form Check Completed by (100% of	of forms): HP 95				
Data Item	Value	Notes			
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Dat	e Removal Completed: <u>// / 0 3</u>			
Location of vermiculite removed indoors	Attic Walls (interior or exterior)				
	Crawl Space (Basement) Sub-floor	•			
	Other:				
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)				
	Crawl Space Basement Sub-floor	†			
	None Other:				
Interior cleaning conducted during removal	(Yes) No	J			
	If Yes, which floors:	, .			
	Basemen) (Ground) Second	Į			
	Garage Attic Other:	:			
· · · · · · · · · · · · · · · · · · ·		<u> </u>			
Was carpet removed during removal activities?	Yes No NA				
Location of vermiculite removed outdoors	Driveway Flowerbed Garden				
· ·	Stockpile Yard None				
<del>-</del>	Other:				
1		S 1 11.			
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	Snowed atter removal			
	Stockpile Yard None	1			
	Other: UNKNOWN	<del>-</del>			

Data Item	Value	Notes			
Pre-Sampling Interview (To be completed with resident)					
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months				
How often do you vacuum with your EPA	more than 6 months  Once a week More than once a week	3 times/w/c			
provided HEPA vacuum?	Twice a month  Once a month  Less than once a month  Other:				
Heating Source	Wood/Coal Electric Propane/Gas Other:				
Heat Distribution -	Forced air Radiant Other:				
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months				
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:			
Addresses of other homes or properties where the occupants visit and may contain emiculite	None	To be completed by field personnel Do these properties currently have indoor or outdoor vermiculite?			
ddresses or names of business where ccupants work	Rosaurs - Jumie Tyson - Logger	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?			
DDITIONAL INFORMATION					

Sheet No.: SA- 000239 LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Id Logbook No: 100305 Page No: 14-15 Sampling Date: 1/21/34 Address: 113 W. Ocle St. Owner/Tenant: Juine Sunderson Business Name: \_\_\_N/A Land Use: Residential School Commercial Roadway Mining Other ( Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA Cassette 1 Cassette 2 Data Item Cassette 3 Index ID CE- 00088 CE- 00087 Location ID BD-002645 BP-002645 12714 Jourse Busemen House Sample Group Ground level Location Description Muster Bedioon Category (circle) FS FB-(field blank) LB-(lot blank) FS) FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) (Indoor Outdoor Matrix Type (circle) Outdoor -Indoor Outdoor -Indoor 25mm\_ (25mg) 37mm . 37mm Filter Diameter (circle) 37mm 25mm re Size (circle) (PCM-08) PCM- 0.8 TEM- .45 TEM- .45 IPCM- 0.8. TEM- .45 Rotometer DryCal Rotometer DryCal Flow Meter Type (circle) DryCal NA Rotometer 05710 05913 Pump ID Number 92045-1 Flow Meter ID No. 42045-1. 1/21/04 Start Date 1/21/04 0835 Start Time 1835 9.03 9.03 Start Flow (L/min) 1/21/04 1/21/04 Stop Date 105 2008 2010 Stop Time 9.03 9.03 Stop Flow (L/min) NO NO. Pump fault? (circle) Yes NA Yes NA NA No Yes MET Station onsite? /No Yes NΑ **™** NA NA Yes No Yes Pre Clear Sample Type Pre Post Clear Post Clear Post NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear Field Comments 1/21/04

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	1

Volpe:

Entered

Archive Blank (circle): Yes No.

Validated

Archive Blank (circle): Yes No

Validated

Volpe: 1

Entered

QC (Field Team)

Entered (LFO) /

sette Lot Number: 310701

Archive Blank (circle): Yes

Validated

Volpe:

Entered

. Sheet.Na.: D-\_000109

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST Logbook No: <u>/60305</u> Page No: <u>/4-/5</u> Sampling Date: <u>//2//04</u> Iress: //3 W. Oak 54. Owner/Tenant: Tyson & Junie Tyson Business Name: W/A Sinieron / Land Use: Residential School Mining Roadway Other ( Commercial Names: PARAN A Sampling Team: MACTEC (CDM )Other \_\_ Cassette 1 Data Item Cassette 2 Cassette 3 Index ID CE- 00089 Location ID BD-002645 Garage, House, Shed. Garage House, Shed, Garage, House, Shed, Sample Group (circle) Pump House Pump House Pump House (Subgroup of the property) Other Other Location Description Basement) Ground Floor, Basement, Ground Floor, Basement, Ground Floor, Second Level (circle) Second Level Second Level Other Other Other (Detailed description point within the location) Horizontal Surfaces Horizontál Surfaces Horizontal Surfaces High Traffic Areas High Traffic Areas High Traffic Areas Matrix Type (circle) **Other** Other\_ Other\_\_\_ FS\_F8-(field blank) LB-(lot blank) FS FB-(field/blank) L8-(tot blank) FB-(field blank) LB-(lot blank) stegory (circle) Sample Area (cm<sup>2</sup>) 200 400 100 NA 100 200 300 NA 100 20d 300 NA (circle) Filter Diameter (circle) 25rhm 25mm 37mm 37mm 25mm 37mmTEM- 45 TEM- .45 Pore Size (circle) PCM- 0.8 PCM- 0.8 TEM-\_45 ! PCM- 0.8 (Dry-Cal) Rotometer Flow Meter Type (circle) NA Ratometer Dry-Cal NA Rotometer Dry-Cal 626666 Pump ID No. Flow Meter ID No. B1610 - 5 1521 Start Time ٥.د Start Flow (L/min) ە.د 2.0 <del>0755</del> 1955 Stop Time Stop Flow (L/min) Yes -No Pump-Fault? (circle) No Nο 100 cm2 - Kitchen **Field Comments** 100 £m² p 1/21/04 F100+ 100 cm<sup>2</sup> 100 cm<sup>2</sup> Cassette Lot Number: 23802 100 cm<sup>2</sup> 100 cm<sup>2</sup> Iloo. Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes No Volpe: Entered \_\_\_\_ Validated Entered \_\_ Validated \_ Entered \_\_\_\_ Validated \_\_\_ Entered (LFO)

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	CIC by

W. Oak St. - Jamie Sunderson 1/21/04 113 W. Oak St. James Sunderson 1/21/08 Author: Gregory Farana An 2 com Author: Gregory Parama Ant Activity: Stationary Air and dust 2030 Orsite @ COM office. samples will be collected as Samples lock in sumple part of the PCE. Sumpling will storage. Ret FSDS SA-000239 be conducted in level DPAE 13-000109 Out of losbook IAW SAP Addendum, CSS, PCE Sampling. 0825 Onsite. Junie present. - 1 CE-00087 (Cround level) pre-celibrate).
0835 CE-00087 started. CE-00088 pic-calibrated and started. Offsite to 2297 KRR. 1145 Onsite PIFBD-002645 completed with resident. Sample Flow Clc, Filter Ck.Ok. 1430 Overte-Resident Not home locked. 1700 Orsite-Kesidents Nothome. 1955 CE-00089 (dust) collected. 2008 CE-00087 stopped, post calibrated and scaled. 2010 CE-00088 stopped, post 1/21/05/ calibrated and sealed.

### 1108 Louisiana Avenue

BD# <u>002323</u>

## LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100305 F	Page No.: <u></u>	1/30/04
Address: 1108 Louisiana Au		House
Occupant: Connie Leckrone		Number: <u>293-6014</u>
Owner (if different than occupant): NA		Number:
Busiñess Name: NA		
Sampling Team: Shown Oliveiro		
Field Form Check Completed by (100% o	N 1 / 3	·
, , , , , , , , , , , , , , , , , , ,		
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: <u>09/03</u>
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other: Nowc	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	1
		1
	None Other:	
Interior cleaning conducted during removal	Yes (No	
	If Yes, which floors:	
<del>-</del>	Basement Ground Second	
	Garage Attic Other:	
Was carpet removed during removal	Yes (No) NA	
activities?		
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
_	Stockpile Yard None	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	North Yard
	Stockpile Yard None	
<b>-</b>	Other: 10 1/36/69	
		<u> </u>

Data Item	Value	- Notes			
Pre-Sampling Interview (To be completed with resident)					
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months	·			
	3 to 4 months 5 to 6 months  more than 6 months				
How often do you vacuum with your EPA provided HEPA vacuum?	Twice a month  Conce a month				
Heating Source	Wood/Coal Electric Propane/Gas Other: Full Oi				
Heat Distribution	Forced air Radiant Other:				
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months				
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:			
Addresses of other homes or properties where the occupants visit and may contain vermiculite	None	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?  —			
Addresses or names of business where occupants work	UPS Commerce Way	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?			
DDITIONAL INFORMATION	<del>-</del>				

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Id Logbook No: 100305 Page No: 19 Sampling Date: 1/30/04

Jiress: 108 Louisiana Ave Owner/Tenant: Connie Leckrone

Business Name: NA

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other Names: Sharan Oliveira

		Names. Shausa Oliveira		
Data Item 😓 🎏 Cassette 1		Cassette 2	Cassette 3	
Index ID	CE- 00125			
Location ID	BD-002223			
Sample Group (circle) (Subgroup of the property)	Garage, House Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other	
Location Description (circle) (Detailed description point within the location)	Basement, Ground Floor, Second Level Other	Basement - Ground Floor, Second Level Other	Basement, Ground Floor, Second Level Other	
Matrix Type (circle)	Honzontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	
ategory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field plank) LB-(lot blank)	
Sample Area (cm²) (circle)	100 200 300 NA	100 200 300 - NA	100 200 300 NA	
Filter Diameter (circle) (	25mm 37mm	25mm 37mm	25mm 37mm	
Pore Síze (circle)	TEM45 PCM- 0.8	TEM45 _ PCM- 0.8	TEM- 45 PCM-02	
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Rotometer Dry-Cal N	Rotometer Dry-Cal NA	
Pump ID No. 612767 B-1610 5-1521		50 /30/04	- 1}	
Flow Meter ID No.	R-11-10 5-1531			
Start Time	1140 1142 1144	1147 1149 1151		
Start Flow (L/min)	20 10 10	2.0 1.C 2.C	71	
Stop Time	1142 1144 1146	1149 11-51 1153		
Stop Flow (L/min)	20 20	2.0 2.0 2.0	3	
·	No Yes	No Yes -	No Yes	
Field Comments	100 cm2 Beschevit horizonta	100 cm² Ground level horizattal surfaces	100 cm²	
23802 100 cm² Grand level		100 cm² 3rd Floor top of steps, any co 100 cm² 2rd Floor hor zook	100 cm <sup>2</sup>	
VHP !	Brick ant, civics, +, les	इलक्षेटबर्ड.	Archive Blook (single): Vac. No.	
Entered (LFO) Y	Archive Blank (circle): Yes No Volpe: Entered Validated	Archive Blank (circle): Yes No  Entered Validated	Archive Blank (circle): Yes No  Entered Validated	
7	l			

For Field Team Completion	Completed by	-QC by
(Provide Initials)		- CC by

Sheet No.: SA- 000271

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100.305 Page Nq: 19 Sampling Date: 1/30/04 dress: 1109 Louisiana Ave Owner/Tenant: Connic Lectrons Business Name: Land Use: (Residential) School Commercial Mining Roadway Other ( Sampling Team: MACTEC (CDM) Other \_\_\_\_ Names: Shawn Oliveina ණා|3ර/04 Cassette 1 Data Item Cassette 2 Cassette 3 Index ID CE- 00124 BD-002223 House 2nd Floor, top Location ID Sample Group Location Description Category (circle) (FS) FB-(field blank) LB-(lot blank) FS FB-(field blank) LB\(lot blank) FS FB-(field blank) LB-(lot blank) (Indoor) Outdoor Matrix Type (circle) NA Indoor Outdoor Indoor Outdoor 25mm Filter Diameter (circle) (25mm) 37mm 25mm 37mm 37mm Pore Size (circle) PCM- 0.8 TEM- .45 TEM- .45 TEM- .45 PCM- 0.8 PCM- 0.8 ow Meter Type (circle) Rotometer DryCal NA Rotometer DryCal Rotometer DryCal NA Pump ID Number 05910 006196 Flow Meter ID No. 1/30/04 Start Date Start Time <del>4</del>347 Start Flow (L/min) 9.19 Stop Date Stop Time 2042 9.19 Stop Flow (L/min) Pump fault? (circle) (0)Yes NA. No Yes NA Yes NA No (No) NΑ MET Station onsite? Yes NA No Yes NA No Yes Post Clear Pre Post Clear Post Clear Sample Type Pre Pre 2<sup>nd</sup> Clear 3<sup>nd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA **Field Comments** Cassette Lot Number: 31201 Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes No 2C (Field Team) Volpe: Volpe: Volpe: Entered (LFO) Entered Entered Entered Validated Validated Validated

For Field Team Completion	Completed by	QC by	
(Provide Initials)	Completed by	GC by	

Sheet No.: SA-\_\_000150

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100305 Page No: 19 Sampling Date: 1/30/04 dress: 1108 Lausia 114 Ave Owner/Tenant: Connie Lockrone Business Name: \_\_\_ 114 School Commercial Land Use: (Residential) Mining Roadway Other ( Sampling Team: MACTEC CDM Other Names: Shown Oliveira ان (<u>ان ان ( C</u>assette 2 Data Item Cassette 1 50 1/30/04 Index ID CE- 00122 CF- 00121 CE-00123 BD-002223 BA-002223 Location ID BD-002323 The House basement to House Sample Group House basement Ground floor Location Description Basement Basement hedroom Category (circle) (FS) FB-(field blank) LB-(lot blank) (FS) FB-(field blank) LB-(lot blank) (FS)FB-(field blank) LB-(lot blank) Indoor Outdoor (Indoor) Outdoor Indoor Outdoor Matrix Type (circle) 25mm 37mm 37mm 25mm Filter Diameter (circle) (25mm) 37mm Pore Size (circle) (PCM- 0.8) PCM- 0.8 PCM- 0.8 TEM- .45 TEM- .45 TEM- .45 w Meter Type (circle) (Rotometer) DryCal Rotometer DryCat (Rotometer) DryCal 05912 Pump ID Number 05913 0689 006196 006196 006196 Flow Meter ID No. 1/30/04 1/30/04 1/30/04 Start Date Start Time 343 845 841 Start Flow (L/min) 9.19 9.14 1/30/04 /30/04 1/30/04 Stop Date 2041 Stop Time 2038 2041 9.19 Stop Flow (L/min) 9 19 9.19 (No) Yes (No) (No) NA Pump fault? (circle) .NA Yes NA Yes MET Station onsite? (Mg) (NO) NΑ (No) NA Yes NA Yes Yes Sample Type Post -Post Clear Pre Post Clear Pre Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) Diplicate of CE-00121 Field Comments Cassette Lot Number: 310301 Archive Blank (circle): Yes No Archive Blank (circle): Yes\_ Archive Blank (circle): Yes No C (Field Team) 49 Volce: Volce: Volce: • Validated Entered (LFO) AT Entered Validated Entered Validated Entered For Field Team Completion

Completed by

QC by

V\$ 1	101	50	),
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(Provide Initiats)

### 1109 Louisiana Ave

BD#<u>20319家</u>

## LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100305	Page No.: 💋 🥇 Site Visit Date:	12/15/03
Address: 1109 Louis		House
Occupant: Jim Allen	Phone N	Number: 0826
Owner (if different than occupant): NA	Phone N	Namber: A/A
Business Name: NA	· · · · · · · · · · · · · · · · · · ·	
Sampling Team: Shawn Oliv	eira	
Field Form Check Completed by (100%	of forms): 40	
	<u> </u>	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: 3/25/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	, , , , , , , , , , , , , , , , , , , ,
	Crawl Space Basement Sub-floor	· ·
-	Other:	·
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	, i
	None Other:	
Interior cleaning conducted during removal	(Yes) No	
	If Yes, which floors:	
-	Basement Ground Second	
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	_
	Other:	<del>-</del>

Data Item	Value	Notes
Pre-Sampling Interview (To be completed	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin: 50 3 1503	
	3 to 4 months 5 to 6 months more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month  Once a month  Less than once a month  Other:	Resident Vacid the entire Living Space with HEPA Vac I time prior to P.C.E.
Heating Source	Wood/Coal Electric Propane/Gas Other:	,
Heat Distribution	Forced air Radiant Other:	
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	Works at Evergreen Motel which has indicor vermiculite.	To be completed by field personnel:  Do these properties currently have indoor or outdoor vermiculite?  —
Addresses or names of business where occupants work	Self Employed	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
	·	· . <del>-</del>
ADDITIONAL INFORMATION		
<u> </u>	<u> </u>	

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR
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Field Logbook No:	100305 Page No:	Sampling [	Date: 13/15/03
	<u> </u>	Owner/Tenant:	n Allen
Jusiness Name:  Land Use: Resident	<i>VA</i> tiaD School Commerc	ial Mining Roadway	Other (
	CTEC CDM Other	•	,
Camping Touris Time	. 1	T TO	
Data Item	Soial 5 0 3 Cassette 1	Cassette 2	Cassette 3
index ID			
	CF- 00041	,	7
Location ID	BD-002198		/-
Sample Group	†		
Location Description	HOUSE Living Room		
	1		
Category (circle)	(FS) FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8 /	TEM45 PCM- 0.8
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal / NA	Rotometer DryCal NA
Pump ID Number	8911		
Flow Meter ID No.	95356-3		
Start Date	12/15/03		
Start Time	838 1144 1516		
Start Flow (L/min)	9.21 -9.21 9.21	/	
Stop Date	12/15/03 -		
Stop Time	1143 1515 1940		-
Stop Flow (L/min)	9.21 9.21 9.21		
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA _
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre - Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments			/bin/
0	•	<del></del> -	1 12/1403
Cassette Lot Number: 334/5	Austria Glassi Fatantala Maria Ata		Academic Manager Control of the Cont
QC (Field Team)	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
7		<del></del>	•

For Civid Town Completion			
For Field Team Completion	Completed by	асьу	
(Provide Initials)	Completed by	_ 400,	

Sheet No.: SA- 000147

LIBBY FIELD SAMPLE DATA	SHEET (FSDS)	FOR STATIONARY AIR
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Eield Logbook No:	<u>100305</u> Page No: _	A,3 Sampling C	Date: <u>12/15/03</u>
tress:	1109 Louisiana	Owner/Tenant:	n Allen
Business Name:			
	tial School Commerc		,
Sampling Team: MA		Names: Shawn Olive	in
Data Item	So 13   S   O3   Cassette 1	Cassette 2	Cassette 3
Index ID	<u> </u>		
ĺ	CE- 00042		/
Location ID	BD-002198		
Sample Group	House .		
Location Description	Basement		
			1. /
	}		/
Category (circle)	(FS)FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	(ndoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	<b>⊘</b> 5mm 37mm	25mm 37mm	25/mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	T/EM45 PCM- 0.8
low Meter Type (circle)	Rotometer DryCai NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0387		_
Flow Meter ID No	95356-3		
Start Date	12/15/03	<u> </u>	·
Start Time	838 1148 1519		
Start Flow (L/min)	9.21 9.21 9.21		
Stop Date	12/15/03	/	
Stop Time	1147 1518 1940	, //	
Stop Flow (L/min)	9.21 9.21 9.21		
Pump fault? (circle)	No Yes NA -	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes /NA	No Yes NA
Sample Type	Pre Post <u>C</u> lear -	Pre Post Clear	Pre Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA -
Field Comments		/	Jp 12/16/03
Cassette Lot Number:			
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe: ————————————————————————————————————	Volpe: Entered Validated	Volpe: Entered Validated
Entered (LFO)	Entered Validated	Circien validated	Validated
() For	Field Team Completion	nieted by	
;	ovide Initials) Comp	oleted by QC by	

vs 101503

Sheet No.: D-\_\_\_\_\_\_00084

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Field Logbook No:	0030	<u>5´</u> Pa	age No:	<i>2</i> ,3_	`;	Sampli	ng Da	te:	12/15/03	?
dress:/	109 La	visia N.	4 Ave.	_ Owner	:/Tenant	:	Tim	Alle.a		
Business Name:/		· · · ·						•		
Land Use: Residentia									(	)
Sampling Team: MAC	TEC Ç	OM) Othe	er	_ Names:	Sho	ر صیمیا	<u> Olive</u>	ivo	·	
Data Item	50 12151	್ರ Cassett	e 1		Casset	tte 2			Cassette	3
Index ID	CE	- 0004	4	,			7 .			7
Location ID	В	D-0021	158							
Sample Group (circle) (Subgroup of the property)	Pump Ho	House SI ouse		Garage, Pump Ho Other		Shed,		Garage, Pump H Other_	- 1	èd, 
Location Description (circle)	Second I	ot Ground evel		Basemer Second L Other_	- 1	d Floor,		Second	ent, Ground F Level	
(Detailed description point within the location)				0			- ;		T	
Matrix Type (circle)		al Surfaces ffic Areas		High Traf	al Surface ffic Areas		<del></del> _	,	tal Surfaces offici Areas	·
tegory (circle)	FS) FB-(	field blank)	LB-(lot blank)	FS FB-(	field blank)	LB-(lot	blank)	FS FB-	(field blank) Ll	3-(lot blank)
Sample Area (cm²) (circle)	100	200 3	00 400	100	200	300	NA.	100	200 300	NA
Filter Diameter (circle)	25mm	37m		25mm /	7 37r	nm		25mm	37mm	
Pore Size (circle)	TEM45	PCM	- 0.8	TEM45	PC	M- 0.8		TEM45	PCM-	0.8
Flow Meter Type (circle)	Rotomete	er Ory-0	Cal NA	Rotomete	r Dry	-Cal	NA	Rotomet	er Dry-Ca	l NA
Pump ID No.		2658	3			K,				
Flow Meter ID No.		10 - 5		<i></i>		1912/	6/03			
Start Time	1519	1522	1525	1528			<del>-,</del>		_	<u> </u>
Start Flow (L/min)	2.0	3.0	2.0	2.0	<u> </u>					<u> </u>
Stop Time	1521	1524	1527	1530		4				<u> </u>
Stop Flow (L/min)	2.0	20	2.0	20	_/	<u>_l:</u> ,	4			<u></u>
Pump Fault? (circle)	(B)	Yes		No 🎺	Yes	-7	14/2	No	Yes	
Field Comments		ntrance		. 100 cm²	-			100 cm <sup>2</sup>	. 4	
Cassette Lot Number: , )	100 cm² lì	sack da		100 cm²			_	100 cm	Spi	2/4/3
Cassette Lot Number: 33-715 2012/5/65	100 cm Ç	ntrance round be	vel Horizonto	100 cm²				100 cm²	/	
	1000cm Bussment Entrance Archive Blank (circle): Yes No		Archive Blank (circle): Yes No		No (	Archive Blank (circle): Yes No				
Entered (LFO)		tered		Entered _					Validat	_
For F	ield Team Co	mpletion				]	_	· · ·		

BI	D#	002198	

#### Residential Activity Log

Resident Address:	1109 LOUDIANA AV	<u> </u>	—
Volunteer Name:	Jim Allen	· · · · · · · · · · · · · · · · · · ·	
Sampling Date(s):	12/15/03		
Personal air sample i	number (s):	·	_
FSDS number(s):	SA-000145, 147	D-00084	_

Date/Time Interval	Go Outside?	Pump problem?	General Activities
12/15/03 -4/1M-6pm	No Yes (mins) Describe	No Yes (describe)	Worked in garage workshop.
6-8pm	No Yes (mins) Describe	No Yes (describe)	In house, weetching T.V.
	No Yes ( mins) Describe	No Yes (describe)	· -
-	No Yes ( mins) Describe	No Yes (describe)	-
	-		
	No Yes ( mins) Describe	No Yes (describe)	
· .			·
	Yes ( mins) Describe	Yes_(describe)	<b>-</b>
	<u> </u>		

Note: Continue on second page if necessary.

Jim Allen Author: Shawn Oliveina 12/15/03 1109 Louisiana Lue EPA/Volpe Post Removal Evaluation. Activity: Post Cleanup Evaluation Sampling at 1109 Louisiana Ave. BD#002198. Stationary Air, and Dust samples will be collected in accordance with the SAP Addendom, PCE Sampling CSS 12/1/03.
DryCal B. 1610, 5-1524 used to calibrate low volume sampling pumpfor Dust sampling Equipment reference pg 48 of this book. 820 Onsite. Jim Allen present 838 CE-00041 Started Wood Stove in Use Sample CE-00041 placed on pump 8911 and precalibrated. Ground floor Living Room. CE-00042 Started, placed on pump 0397 and precalibrated. Placed in Basement at bottom of steps. 845 Depart Site. 1140 Arrive onsite flowcheck CE-00041, CE-00042 both ot. Filter Checks OK. 1149 Depart Site. 1440 Arrive onside. Flowcheck. CE-00041, CE-00042, both ox, Filter Checks ok, Wood Stove in use. Complete P.I.F .-1530 Dust Sample CE-00044 collected, capped,

Jim Allen	Auth	or: Shawn Oliveira	<b>)</b>
		Velpa. 12/15/0	3
1530 Cont'd:	and sed	uled. Refer to FSDS	
0-000084			<b>50</b>
1542 Departs	site.		
1935 Arriveat	site-Mi	. Allen Present. Wood	
stovestillin	n use.Re	sident spent most of	
day in wor	kshop.	<del></del>	<b>a</b>
1940 CE-0001	yl stoppe	ed post-calibrated	į
and sealed	r. Kef r	505-50E 3A-000148	
1942 CE-0004	2 stoppe	A. post calibrated, and A-000147.	-   ;
sealed Hef	F505 5	A-000147.	1
1950 Departs	ida, afti	en Acoving equipment	_
		g as PAE.	
		/	;
		1.,.	;
	•		
		( <sup>(</sup> )   )	
	11		
,	لورا ا		
1.60	5		
13/13/			
		Durch	
· · · · · · · · · · · · · · · · · · ·		<del></del>	١,

### 1116 Utah Avenue

BD#\_*002175*\_\_

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

	Page No.:5 Site Visit Date:	12/16/03
Address:	ve Structure Description:	House
Occupant: Junes & Many	England Phone !	Number: 293-6550
Owner (if different than occupant): AIA	Phone !	Number: <u>UA</u> -
Business Name:	<u> </u>	
Sampling Team: Shawn Clive		<u></u>
Field Form Check Completed by (100% of	of forms): HO ps	· · · · · · · · · · · · · · · · · · ·
		<del></del>
Data Item	Value	Notes 2 to a /
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: 3/28/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
· .	Crawl Space Basement Sub-floor	
- "	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
_	Crawl Space Basement Sub-floor	
	None Other:	
Interior cleaning conducted during removal	(Yes) No	· Courtesy cleaning of ground level.  • Cleaning of 2nd level
	If Yes, which floors:	o Cleaning of 2nd level
-	Basement Ground Second	
	Garage Attic- Other:	:
Was carpet removed during removal	Yes (No) NA	
activities?	Tes (19)	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	<b>-</b>
	Stockpile Yard None	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	<del></del>
·		
<u> </u>	Stockpile Yard None	•
	Other:	<u></u>

Data Item	Value	Notes
Pre-Sampling Interview (To be completed	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
	Immediately 1 to 2 months	
	3 to 4 months 5 to 6 months	
	more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week	Received on 12/10/0: Used once prior to sampling.
· ·	Twice a month Once a month	Used once prior
	Less than once a month	to sampling.
<del></del>	Other:	
Heating Source	Wood/Coal Electric Propane/Gas Other:	Primarily wood heat
feat Distribution	Forced air Radiant	
	Other:	
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months	
m Housing godies was used.	3 to 4 months 5 to 6 months	
	more than 6 months NA	
fave any of the occupants been in contact with any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties the occupants visit and may contain ermiculite	NA	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
		_
ddresses or names of business where ccupants work	Retired	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
<b>-</b>	. <del>-</del>	
DDITIONAL INFORMATION		<del>-</del>

Sheet No.: SA- 000150

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR
abook No: 100305 Page No: 4 Sampling Date: 12/16/03

	1106 Utah Ave		es + Mary England
	<u>NA                                     </u>		7 7
Land Use: Residen	tial School Commerc CTEC CDM Other	•	Other ( )
Camping ream. WA		Names	12/1/2
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID			
	CE- 00048		
Location ID	RN-002175		, , , , , , , , , , , , , , , , , , ,
Sample Group	HOUSE		
Location Description	Basement		
		100	
Category (circle)	(FS) FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-Fat blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	IEM45 PCM- 0.8
low Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	8911		
Flow Meter IO No.	95356-3		
Start Date	12/16/03		
Start Time	341		
Start Flow (L/min)	921		
Stop Date	12/16/03		
Stop Time	1952		
Stop Flow (L/min)	9,21		
Pump fault? (circle)	No Yes NA _	No Yes NA	No Yes NA
MET Station onsite?	√6 Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear —	Pre Post Clear
- <u>-</u>	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	Woodstove in use		
<u> </u>	\$7ft away		
Cassette Lot Number:			
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No \
CC (Field Team) <u>W)</u> Entered (LFO)	Volpe:   Entered Validated	Volpe: State Volpe: Vol	Volpe: Entered Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)		 

Sheet No.: SA- 000161

#### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No:	100305 Page No: _	4 Sampling D	Date: <u>/2/16/03</u>
dress: <u>                                     </u>	400 Utah Ave	Owner/Tenant:	Mes & Mary Engla
Business Name:	V.A	<u> </u>	7
Land Use: Residen		· · · · · · · · · · · · · · · · · · ·	•
Sampling ream: MA	CTEC CDM Other	Names: <u>_ <i>Shawn Oli</i></u>	US IND
Data Item	© 12/10/03 Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00049		
Location ID	BN-002175		
Sample Group	Hoyse		
Location Description	House 2nd Level Topof Steps		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(tot blank)	FS FB-(field blank) LB-(lot-blank)
Matrix Type (circle)	(ndoor Outdoor NA	Indoor Outdoon S. NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
ow Meter Type (circle)	Rotometer OryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0387	3	
Flow Meter ID No.	95356-3	1/2	
Start Date	12/16/03	\	
Start Time	844 1140		1/2
Start Flow (L/min)	9.21 9.21		
Stop Date	12/16/03		
Stop Time	1139 1954		. \
Stop Flow (L/min)	9.21 8.21		
Pump fault? (dirde)	No Yes NA	No Yes NA	No Yes NA.
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear
Field Comments	_		
Cassette Lot Number:	,		\
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe: Entered Validated
Entered (LFO)	Entered Validated	Entered Validated	Eilleten valinaten

For Field Team Completion	Completed by	QC by	
(Provide Initials)	Completed by	<u> </u>	

Sheet Nol: SA- 000162

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100305 Page No: 4 Sampling Date: 12/16/03 Press: Paints/116 HOG Utah Ave Owner/Tenant: James + Mary England Business Name: Land Use: (Residential) School Commercial Mining Roadway Other ( Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: Shawn Chive in 50 12 16 03 Cassette 1 Data Item . Cassette 2 Cassette 3 Index ID CE- 00050 Location ID BD-002125 Sample Group house Kitchen/Dining Room Location Description Category (circle) FS) FB-(field blank) LB-(lot blank) FS FB-(field blank) \LB-(lot blank) FS FB-(field blank) LB-(lot blank) (ndoor) Outdoor NA Indoor Outdoor NA NA Matrix Type (circle) indoor Outdoor 65mm Filter Diameter (circle) 37mm 25mm 37mm 25mm 37mm Pore Size (circle) (PCM-0.8) TEM- .45 TEM- .45 PCM- 0.8 PCM- 0.8 TEM- .45 w Meter Type (circle) Rotometer DryCal Rotometer DryCal Rotometer DryCal Pump ID Number 0689 Flow Meter ID No. 95356-3 12/16/03 Start Date Start Time 848 Start Flow (L/min) 12/16/03 Stop Date Stop Time 1956 Stop Flow (L/min) 9.21 Yes Pump fault? (circle)  $(N_0)$ Yes No Yes NA No NA (No) Νo Yes NA MET Station onsite? Yes NA No Yes NA Sample Type Pre Post Clear Pre -Post Clear Рге Post Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear '3<sup>rd</sup> Clear (NA) Field Comments. Cassette Lot Number: Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes No. C (Field Team) Volpe: Volce: Volpe: Entered (LFO) & Entered \_ Validated Entered ... Validated Entered Validated

For Field Team Completion	Completed by	QC by
(Provide Initials) **	Completed by	40 09

Sheet No.: D- 000087

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Sield Logbook No: 10	0305 Page No:	Sampling Date Owner/Tenant:	e: 12/16/03
dress: 1116 HOG	Viah Ave	Owner/Tenant: <u>James</u>	+ Mary England
Business Name: NA	<u> </u>		<b>9</b> •
	School Commercial		· · ·
Sampling Team: MAC	<u> </u>	Names: <u>Shawn Oliveir</u>	<u> </u>
Data Item	المرا المر المر	Cassette 2	Cassette 3
Index ID	CE- 00051		
Location ID	BD-002175		
Sample Group (circle) (Subgroup of the propeny)	Garage (House) Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other
Location Description (circle) (Detailed description point within the location)	Second Level Other	Basement, Ground Floor, Second Level Other	Basement Ground Floor, Second Level Other
Matrix Type (circle)	Horizontal Surfaces  (High Traffic Areas  Other	Horizontal Surfaces High Traffic Areas Other	Horizortal Surfaces High Traffic Areas Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field brank) L8-(lot blank)	FS FB-(lett clank) CB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm _37mm	25mm / 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM- 45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-CaD NA	Rotometer Dry-Cal NA	Rotometer Ory-Cal NA
Pump ID No.	626583	Shan Oliver 12	603
Flow Meter ID No.	B1610-51521	Manufaction	7
Start Time	1519 1522 1525	1528	
Start Flow (L/min),	2.0 2.0 2.0	2.0	
Stop Time	1521 1524 1527	1530	
Stop Flow (L/min)	2.0 2.0 20	2.0	
Pump Fault? (circle)	Yes	No Yes	No Yes
Field Comments	100 cm² Fronten france	100 cm² d Ad Level - Horizontal Surface	100 cm² .
Cassette Lot Number:	100 cm² Busement landing corpet.	- Horizontal Surface  100 cm² Lebou attic entrain	700 cm <sup>2</sup>
<u> </u>	100 cm²2nd level carpet	100 cm²	100 cm <sup>2</sup>
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated
			-

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	QC by

### Shawn Oliveira : 3-1547 cell. 293-8595 work

#### 80#<u>002175</u>

#### Residential Activity Log

Resident Address:	16 Ulah
Volunteer Name:	enes + Mary England
Sampling Date(s):	13/16/03
Personal air sample numbe	er (s): Stationary Air (CE-00048, 49,50) Aust CE-0005
	DIGO, 161, 162 N-000087

Date/Time Interval	Go Outside?	Pump problem?	General Activities
	No Yes ( mins) Describe	No Yes (describe)	B
	No Yes ( mins) Describe	No Yes (describe)	See .
	No Yes ( mins) Describe	No Yes (describe)	a far
-	No Yes ( mins) Describe	No Yes (describe)	en de
	No Yes ( mins) Describe	No Yes (describe)	
	No Yes ( mins) Describe - 	No - Yes (describe) 	

Note: Continue on second page if necessary.

les a Mary England 12/15/03 Volpe/EPA Author: Shawn Oliveira Post-Removal Evaluation Activity: Post Cleanup Engling tion sampling at 1106 Utah Ave. Ja BB-002175 Names + Mary England present. 830 Onsite Stationary air and Dust samples will be collected with the SAP Addendum, PCE Sampling, 655/2/1/03. Dry Cal B-1610, 5-1521 used to calibrate 1000 volume sample pump for Dust samples. Equipment Ref pg 48 of this book 841 CE -00048 Started, precalibrated, and placed on pump. Basement, wood stove in use 7 ft. away. 844CE-00049 started, placed on pump and precalibrated. Upstairs, beneath afficentrance. 848CE-00050 started, placed on pump and precalibrated. Ground Level. 400 Depart site. 1137 Arrive onside, flourcheck CE-00049, 48,50. Flowhecks ok. Filter checks ok. 1155 Depart site 1507 Arrive onsite, flow check CE-00048, 49,50, Flowchecks ok. Filterchecks ok. 2/16/03 Shaw Olivin

Dames + Mary England	ALMON: Shown Chivery
Volpe/EPA	12/16/03
Volpe/EPA 1507 Cont & wood sta	ove still in use in
basement, Complet	e PI.F.
1530 Oust Sample CE - 0	20051 collected copped.
and sealed Refer	to FSOS D-000087.
539 Departsite	
	w check CE-00048,49,50
Flow checks ok, filt	er check of Wood
stove still in use.	
	lete Residential Activity
1952 CE-00048 Stop	ped, post-calibrated,
and sealed. Net, 1	505 5A-000190
	d, post-calibrated, and
sealed Ref FSD.	
1956CE-00050stapp	SASSI CONTEXT
and sealed. Ref F	
2011 Depart to CDM	
	1
	1)
102 / hour	
12/10/03/14	
104	Derin

### 2129 Highway 2 S

BU#	002290

Field Logbook No.: 1003/145 F	Page No.: <u>/ io</u> Site Visit Date:	1/23/04
Address: 2139 HWY 2 5	Structure Description:	
Occupant: John a Tracia Cora		Number: 293-3879
Owner (if different than occupant): <u>\( \lambda \)</u>		Number: <u>NA</u>
Business Name: <u>N/A</u>		
Sampling Team: Shawn Oliwing	-DM	
Field Form Check Completed by (100% o	f forms): Vp //3	
	, , <u>,</u> , <u>,</u> ,	<del></del>
Data Item	Value	. Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: 5/03
Location of vermiculite removed indoors	Attic Walls (Interior or exterior)	
	Crawl Space Basement (Sub-floor)	
	Other:	-
Location of vermiculite remaining indoors	Attic Walls interior or exterior	
	Crawl Space Basement (Sub-floor)	
	None Other:	
Interior cleaning conducted during removal	(Yes) No	
	If Yes, which floors:	
	Basement Ground Second	
	Garage April 50 1 25 0-1	•
M		<u> </u>
Was carpet removed during removal activities?	Yes (No) NA	·
Location of vermiculite removed outdoors	Driveway Flowerbed_ Garden	
	Stockpile Yard None	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	· · · · · · · · · · · · · · · · · · ·
2000.1011 of Vertificante Fernanting Coldoors		
· -	Stockpile Yard None	_
	Other:	· · · · · · · · · · · · · · · · · · ·

Data Item	Value	. Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
	Immediately 1 to 2 months 3 to 4 months 5 to 6 months	
	more than 6 months	
How often do you vacuum with-your EPA provided HEPA vacuum?	Once a week  More than once a week  Twice a month  Once a month	
<u>-</u>	Less than once a month	
<del> </del>	Other:	
Heating Source	Wood/Coal Electric Propane/Gas Other:	-
Heat Distribution	Forced air Radiant -	-
How soon after the removal was a forced air heating source first used?	Other:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes (No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	Man .	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
Addresses or names of business where occupants work	John-Libby Police Station	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
	-	
ADDITIONAL INFORMATION	· · · · · · · · · · · · · · · · · ·	
······································		

Sheet No.: SA-\_000172

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR reld Logbook No: 1003045 Page No: 16 Sampling Date: 1/24/63 09

dress: 2/29 /4wu 2 S. Owner/Tenant: John Toncy Conham Business Name: N/A Land Use: Residential School Commercial Mining Roadway Other ( Sampling Team: MACTEC (CDM) Other \_\_\_\_\_ Names: DARANA 1/23/04 Cassette 2 Data Item Cassette 3 Index ID CE- 00091 CE- 00090 Location ID BD-002290 BD-003290 House Sample Group House 2nd level Living Koom Location Description Ground Level Category (circle) FSJ FB-(field blank) LB-(lot blank) FS )FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) (Indoor) Matrix Type (circle) Outdoor-Outdoor -Indoor Outdoor 25mm 37mm Filter Diameter (circle) 25mm 37mm 37mm 25mm Rore Size (circle) PCM- 0.8 ØCM- 0.8 PC-FI- 0.8 TEM- .45 TEM- .45 TEM- .45 Rotometer DryCal Tow Meter Type (circle) Rotometer DryCal NA Rotometer DryCal NA 0689 Pump ID Number 92045-1 92045-1 Flow Meter ID No. 1/24/04 1124/04 Start Date 0825 Start Time 0832 9.43 Start Flow (L/min) 1/23/04 Stop Date 1/23/04 Stop Time Stop Flow (L/min) 9.03 (No. Yes No. Pump fault? (circle) NA Yes NA No .Yes NA No Yes NA (No.) NA No NA MET Station onsite? Yes Yes Post Post Pre Post - Clear Sample Type Pre Clear Pre Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear **Field Comments** Cassette Lot Number: 33415 Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes No QC (Field Team) 40 Volpe: Volpe: Volpe: Entered (LFO) 712 Entered Entered Validated | Entered Validated Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	QC 59

Sheet No.: D- 000090

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Id Logbook No:				<u> //.2</u>	مداكم	_ Samp	ling Da	te:/	<u> 23 (04</u>	
Jusiness Name: (ਤੋਂ		<u>L .3007</u>	<u> </u>	_ Own	ei/ (ei	nant	<u>  2008) 4</u>	-Trace (	<u>ाडर मिल्ट भ्रम्</u>	
		hool	Commercia	1 A4:	ining	Pond		Other (		,
Land Use: Residenting Sampling Team: MAC	_				_		lway ثرستا	Other (		)
	_	Casset						<del>                                     </del>		
Data Item	1 /	Casset	te 1 	1	Cas	ssette 2			assette (	3 
Index ID	/c	E- 000	94							
Location ID	ا ه	-003	290		<u> </u>					
Sample Group (circle)	Garage	House S	hed,	Garage	₃,√Hou:	se, Shed,		Garage, H	ouse, Shed	,
(Subgroup of the property)	Pump H	louse		Pumpi	ноубе:			Pump Hous	se T	
	Other_			Other_	<del></del>	<u>·</u>		Other		
Location Description		nt, Groun	d Floor	1		round Floo	r,		Ground Flo	oor,
(circle)	Second		,	Second				Second Lev		
(Detailed description point within the location)	Other		<u> </u>	<u> </u>		137		Other		
Adotriy Tuno (cirolo)		tal Surfaces offic Areas	=	Horizor High Tr		faces	,	Horizontal S High Traffic		-
Matrix Type (circle)	Other_	mic Areas.		Other_		•		Other		
tegory (circle)	FS) FB-	(field blank)	LB-(lot blank)	FS FB	-(field b	lank) LB	ot blank)	FS FB-(fiel	d blank) LB-	(lot blank)
Sample Area (cm²) (circle)	100	200 3 (400	100 NA	100	200	300 🏋	NA	100 200	300	NA
Filter Diameter (circle)	25mm	. 37m	im .	25mm		37mm	1/2	25mm _	37mm	
Pore Size (circle)	TEM45	PCN	1- 0.8	TEM4	5	PCM- 0.8	ľ	TEM .45	PCM- 0.	8
Flow Meter Type (circle)	Rotomet	er Dry-	Cal NA	Rotome	ter	Dry-Cal	NA\	Rotometer	Dry-Cal	NA.
Pump ID No. 201/23/0	4 -137	<i>ा0</i> - ई	1521	< 6a	66	66		<b>`</b>		
Flow Meter ID No.	BIL	10-51	521	<u> </u>		<del> </del>		(		
Start Time	1940	1943	1945	1945	1			16,		
Start Flow (L/min)	2.0	20	2.0	20	<u> </u>	<u> </u>		1		
Stop Time .	1942	1945	19+7	1950						
Stop Flow (L/min)	3.0	3.0	2.0	2.0	<u> </u>					
Pump Fault? (circle)	(No)	Yes	· 	No		Yes		No \	Yes	
Field Comments ,	100 cm² . در	ر شربه المستران المست المرث	Santin de Albania	100 cm²		4112.		100 cm²		
	•	Back Evi		100 cm <sup>2</sup>	ريسانات	-		100 cm <sup>2</sup>		
Cassette Lot Number:		., _					[	Ì		
<u> 23502</u>	100 cm <sup>2</sup> 7	re Topofist	airs	100 cm²		•	}	100 cm²		
NA	16026						- 1			
Y	Archive Bla	ank (circle):		Archive BI				Archive Blank (		No
Entered (LFO)	Volpe: En	tered	Validated	Entered_		Validated _		Entered	_ Validated	
		<u></u>	•							

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	"""

16 2129 HWY 25 John + Tracy Graham 1/23/04 PCE - EPA/ Volpe Author: Shown Oliveira Activity: Stationary Air and dust samples will be collected as part of the R.E. Sampling will be conducted in Level DAPE, I.A.W. SAP Addending CSS, PCE Sampling. 820 Onsite, Terry Crookspresent, resident will not be home intilation 6:30 p.m. CE-00090 (Ground Level) set-up and pre-calibrated. 825 CE -00090 started. 829 CE-00091 set-up and pre-calibrated. 831 CE-00091 started Offsite to 86 Paliga 1840 Onsite, resident not home. 1937 Arrive onside. Flowcheck ok, Filter check ok. 1940 CE-00094 (Aust) Collected. 2028 Arrive onside CE-00090 Stopped, post-calibrated, and collected. 2034 C.E-00091 stopped, post calibrated, and collected. 2113 Return to CAM, samples lacked in sample storage Ref F3DS: SA-020172, Δ-200090. 1/23/04 Sleen The

### 86 Paliga Dr

Field Logbook No.: 100305 Page No.: 17 Site Visit Date: 1/33/0	
Address: 86 Action Dr. Structure Description: House	<b>=</b> .
Occupant: Ive s Morgan Phone Number: 29	
Owner (if different than occupant): 1/A Phone Number:	<u> </u>
Business Name: NA	<del></del>
Sampling Team: Shewn Oliveire	· · · · · · · · · · · · · · · · · · ·
Field Form Check Completed by (100% of forms):	
Data Item Value	Notes
CLEAN-UP SUMMARY (To be completed using removal completion folders)  Date Removal Co	mpleted: 803
Location of vermiculite removed indoors Attic Walls (interior or exterior)	'
Crawl Space Basement Sub-floor	•
Other: NA -	-
Location of vermiculite remaining indoors Attic Walls (interior or exterior)	
Crawl Space Basement Sub-floor	
None Other:	·
Interior cleaning conducted during removal Yes No	
If Yes, which floors:	
Basement Ground Second	-
Garage Attic Other:	
Was carpet removed during removal Yes No NA	
Location of vermiculite removed outdoors Driveway Flowerbed Garden	•
Stockpite (Yard) None	
Other:	
Location of vermiculite remaining outdoors Driveway Flowerbed Garden	
Stockpile YardNone	•
Other:	

Pre-Sampling Interview (To be complete	Value	- Notes
Te-opinibilia litter trest (10 pe combiere	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
• •	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	-
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week Twice a month  Less than once a month  Other:	-
Heating Source	Wood/Coal Electric Propane/Gas Other:	
Heat Distribution	Forced air Radiant Other:	~
How soon after the removal was a forced air heating source first used?	immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	`
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain ermiculite	Nonc -	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
· <del>····································</del>	Worksie home	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?

Sheet No.: SA-000173---

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Eield Logbook No:	/CO.3.C.5 Page No: _	Sampling [	Date:/3.3/0.4
dress: <u>Sa Pa</u>	liga	Owner/Tenant: LCe	5 Margan
Business Name: 📆	124		7
Land Use: Resider		<del></del>	•
Sampling Team: MA	CTEC COMP Other	Names: <u>Shown ()[</u>	veire
Data Item	Soil Sort Cassette 1	Sel 23/04 Cassette 2	Cassette 3
Index ID	CE- 00092	CE- 00093	
Location ID	BD-003208	BD-003208	
Sample Group	Busement	House	\
Location Description	Office	Room	100 to
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(fiell black) LB-(fot blank)
Matrix Type (circle)	Indoor Outdoor NA	(ndoor Outdoor NA	Indoor Guldoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PGM- 0.8
low Meter Type (dirde)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer Decei NA
Pump ID Number	0891	0891-A	
Flow Meter ID No.	93045-1	92045-1	
Start Date	1/23/04	1/23/04	
Start Time	0850	0853	
Start Flow (L/min)	9.03	9.03	
Stop Date	1/23/04	1/23/04	\
Stop Time	2056 Buch	2059 15 16	
Stop Flow (L/min)	9.03 16.	9.03	
Pump fault? (circle)	(No) Yes _NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post - Clear	Pre Post Clear	Pre Post Clear
· ·	2 <sup>nd</sup> Clear 3 <sup>nd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	in basement.	_	_
Cassette Lot Number:			
33415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
V	r Field Team Completion Comp	leted by QC by	

(Provide Initials)

000089

			vv
Sheet	No.:	Ď-	

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Field Logbook No:/	20305 Page No:	77 Sampling Date	e:
dress: <i>\$la</i>	Palina Dr.	Owner/Tenant: (८)८-ऽ	Margan
Business Name: _AJA		20/123/04	<b>7</b>
Land Use: (Residentia	School Commercia	D Mining Roadway	Other ( )
Sampling Team: MAC	TEC CDM Other	Names: Shawn Olivein	YE
Data Item	Solvasolte 1	Cassette 2	Cassette 3
Index ID	CE- 00095		
Location ID	BD-003208		
Sample Group (circle) (Subgroup of the property)	Garage, (House Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other
Location Description (circle) (Detailed description point within	Basement Ground Floor Second Level Other	Basement, Ground Floor, Second Level Other	Basement, Ground Floor, Second Level Other
ine location)  Matrix Type (circle)	High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces  High Traffic Areas  Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(tot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEG45 PCM-0.8
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	676666		<u> </u>
Flow Meter ID No.	B-1610 5-1521	1/3./	
Start Time	3047 3044 -3047	2050 Jay/1	
Start Flow (L/min)	2.0 2.0 2.0	20	
Stop Time	2044 2046 2049	2052	
Stop Flow (L/min)	20 20 20	2.0	·
Pump Fault? (circle)	No Yes	No Yes	No. Yes
Field Comments _	100 cm²-Front Entranco. · Lavoleum	100 cm² Basement _ Horizonkal Sunfaces	100 cm <sup>2</sup>
- Cassette Lot Number:	100 cm² Ground Level	100 cm <sup>2</sup> King	100 cm <sup>2</sup>
<u> 33902</u>	100 cm² Basinint cutrons backyavel	100 cm <sup>2</sup>	100 cm <sup>2</sup>
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated\

Wes Morgan 86 Paliga Dr. 1/83/04 PCE-EPA/Volpe Author. Shown Clive in Activity Stationary A rand dust samples. will be collected as part of the P.C.E. Sampling will be conducted in Level DARE I.A.W 3AP Addendum, CSS, PLE Sampling. 846 Onsite Wes Morgan present CE-00092 set-up and pre-calibrated 850 CE-00092 stanted.; 852 CE-00093 set up and pre calibrates 663 CE-00093 started 1 1145 Onsite, resident not home. 1452 Christe, resident not home. 1738 Onside, resident not home. 2036 Onside Flowcheck ok, Fillercheckok. 2042 CE-00095 (Oust) collected 2054 CE-00092 stopped, post-calibrated, and collect 2009 CE 00093 stopped, post calibroad, and collected. 21.13 Raturn to CDM, samples locked in sample. storage. Ref FSAS: 54-000173, D-000089

#### 616 Wisconsin Ave

Field Logbook No.: 100305	Page No.: <u>/2 - / 3</u> Site Visit Date:/	17/04
Address: 616 Wisconsi	Structure Description	Chillon House
Occupant: Garrow		Number: 293-8493
Owner (if different than occupant):s	Phone	Number: Seeme
Business Name: N/A		<u> </u>
Sampling Team: PARANA	<del></del>	
Field Form Check Completed by (100% of	of forms): 40 p3	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	te Removal Completed: 5/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
Ì	Crawl Space Basement Sub-floor	
	Other:	11-10-11
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	Areus could not
	Crawl Space Basement (Sub-floor)	get to in the
		get to in the sub-floor
	None Other:	
Interior cleaning conducted during removal	(res) No	
	If Yes, which floors:	
	Basement Ground Second	
	Garage Attic Other:	
Was carpet removed during removal	Yes No NA	
activities?		
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	_
	Stockpile Yard None	!
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
coolidii oi veriiliculte feriilantiilig batoosis		
- <del>-</del> -	Stockpile Yard None	] -
	Other:	<u> </u>

Data Item	Value	. Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	Recieved 2 day ago and Resid had not had a chance to use
How often do you vacuum with your EPA rovided HEPA vacuum?	Once a week  Twice a month  Once a month  Less than once a month  Other:	17/04
leating Source	Wood/Coal Electric Propane/Gas Other: Fuel O.	
leat Distribution (	Forced air Radiant Other:	-
ow soon after the removal was a forced (in heating source first used?	Immediately 1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
ave any of the occupants been in contact ith any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties here the occupants visit and may contain ermiculite	None	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
odresses or names of business where cupants work	FISH, WITCH RICE AND TAIKS	indoor or outdoor vermiculite?

Sheet No.: SA- 000233 LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100305 Page No: 12-13 Sampling Date: 1/17/04

ress: 616 Wisconsin Ave. Owner/Tenant: 6acrow Business Name: N/4 Land Use: (Residential) School Commercial Mining Roadway Other ( Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA 117/04 101117/04 1117/04 Cassette 2 Cassette 3 Data Item Cassette 1 Index ID CE- 00074 CE- 00073 CE- 00075 BD-001574 Location ID BD-00 1574 BD-001574 House House 2 md level Sample Group Basement Location Description Hallway Living Room Category (circle) FS )FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) indaor) Indoor Indoor Outdoor Outdoor Outdoor Matrix Type (circle) 25mm') (25mm) 25mm\_ 37mm Filter Diameter (circle) 37mm 37mm Pore Size (circle) PCM-0.8 CM-0.8 TEM- .45 PCM- 0.8 TEM- .45 TEM- .45 Rotometer Rotometer Rotometer DryCal low Meter Type (circle) DryCal DryCal 05913 0387 Pump ID Number 92045-1 92045-1 92045-1 Flow Meter ID No. 1/17/04 1/17/04 Start Date 1/17/04 0907 0855 Start Time 0900

9,01 9.06 Start Flow (L/min) 9.01 1/17/04 BIN1/04 Stop Date 2026 Stop Time 2017 9.01 Stop Flow (L/min) Pump fault? (circle) No) Yes NA No. Yes NA Yes NA No No MET Station onsite? Yes NA Yes NA Yes NA - Post . Post Рге Sample Type Clear Clear Pre Clear Post 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear Field Comments Cassette Lot Number: Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes QC (Field Team) 1 Voice: Volpe: Volce: Entered (LFO) Entered Entered Validated Entered Validated Validated

For Field Team Completion QC by Completed by 26 (Provide Initials)

\_\_\_\_\_Sheet No.: D-\_\_\_000105

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Business Name:	_+	I Minimum Danker	045/
Land Use: Residential Sampling Team: MAC	TEC CDM Other	l Mining Roadway Names: <i>PARANA</i>	Other ( )
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00076		
Location ID	BD-001574		
Sample Group (circle) (Subgroup of the property)	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other
Location Description (circle) (Detailed description point within the location)	Basement) Ground Floor, Second Level	Basement, Ground Floor, Second Level Other	Basement, Ground Floor, Second Level Other
Matrix Type (circle)	Morizentel Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other
itegory (circle)	(FS) FB-(field blank) LB-(lot blank)	FS F8 field blank) L8-(lot blank)	FS FB-(field blank) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 / 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- 45 PCM- 0.8	TEM .45 PCM- 0.8	TEM45 PCM0.8
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	(26666	Jan 1	
Flow Meter ID No.	B1610-51521	1/1/109	
Start Time	1632 1635 1638	1641 1645 1648	
Start Flow (L/min)	2.0 2.0 2.0	2.0 2.0 2.0	<del>                                     </del>
Stop Time	1634 1637 1640	1143 1647 144 1650	
Stop Flow (L/min)	2.0 2.0 2.0	2.0 2.0 2.0	
Pump Fault? (circle)	No Yes	No Yes	No /- Yes
Field Comments	100 cm found level	100 cm² of end to ble	100 cm <sup>2</sup>
 Cassette Lot Number: .	of computer desk	100 cm² Busement	100 cm <sup>2</sup> 1/17/0
- 23802	Kitcher floor 100 cm² 2rd level floor @ top of steps	100 cm² Basement top of hotwater tank	100 cm <sup>2</sup> —
<b>,</b>	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Intered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated

For Field Team Completion
(Provide Initials)

Completed by

Gny"

QC by

72

12 616 Wisconsin AVC-Garrow 1/17/04 EE-EPA/Volpe Anthor: Gregory Parana CDM Activity: Stationary Air and dust samples will be collected in BA-001574. Sampling will be conducted in level BPPE IAW SAP Addendum, CSS, PCE Sampling 12/1/03. Equipment Keterence po 48 of this losbook. 0845 Orsite. CE-000 73 pre-calibral 085\$ CE-00073 started. ----CE-00074 pre-calibrated. 0900 CE-00074 started ----CE-00075 pre-callbrated. 0902 CE-00075 started. All samples calibration conducted with rotometer 92045-1. Offsite. Resident gave me key to access house Resident will Not be home today. PIF BD-001574 completed with resident. 1130 Onsite. Flow ck-OK Filter CK-OK Offs.te. ---1420 Onsite. Flow ck-OK Filter CK-OK. Offsite.

PCE-EPAINOLDE Author: Gregory Para 1630 ONS Ite GE - BILITION 1650 GE-00074 (dust) collected and scaled. Flowick-OK Filter CK-OK. Offsite. Resident not boom home 2017 CE-000 73 stopped, post calibrated and scaled. 2021 CE-00074 stopped, post calibrated and sculed. All equipment decontaminado House locked and Keys placed under door. 2037 ONSITE COM OFFICE. Samples placed in sample storase, Ket FSDS 54-000236, D-000105 PIF BD-001574. 2045 Out of logbook. Contract to the state of the st 1/17/04

### 178 Scenery Rd

Field Logbook No.: 100305 F	Page No.: 6, 7 Site Visit Date:	12/17/03
Address: 178 Scenery	Structure Description:	House
	Phone N	Number: <u>293-2149</u>
Owner (if different than occupant):	1 Phone N	Number: <i>\mathcal{U}A</i>
Business Name: NA	<u></u>	
Sampling Team: Shaum Olivei		
Field Form Check Completed by (100% of		· · · · · · · · · · · · · · · · · · ·
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: <u>3/03</u>
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
-	Crawl Space Basement Sub-floor	
	Other:	_
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	(None) Other:	<u> </u>
Interior cleaning conducted during removal	Yes No	Crawlspace
	If Yes, which floors:	,
	Basement Ground Second	п
	Garage Attic Other:	·
Was carred tomough during terrains		
Was carpet removed during removal activities?	Yes (No) NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	<u> </u>
	Stockpile Yard (None)	•
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	<del></del>
Location of Verificative remaining outdoors		
· _	Stockpile Yard (None)	-
	Other:	<del>-</del>

Data Item	Value	Notes
Pre-Sampling Interview (To be complete	d with resident)	<u> </u>
Has EPA provided a HEPA vacuum and has it been used since removal?  How often do you vacuum with your EPA	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Once a week More than once a week	Received 12/15/03 Used twice prior to sampling
provided HEPA vacuum?	Twice a month  Cess than once a month  Other:	
Heating Source	Wood/Coal Electric Propane/Sas Other: Or (	
Heat Distribution	Forced air Radiant Other:	-
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	· ,
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	NA -	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
Addresses or names of business where occupants work	Rosever's Student.	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
ADDITIONAL INFORMATION		·

Sheet No.: SA- 000163

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Eield Logbook No: 100305 Page No: 6,7 Sampling Date: 12/17/03 Iress: 178 Scenery Rd Owner/Tenant: Jeff Welson Business Name: Land Use: (Residential) School Commercial Mining Roadway Other ( Sampling Team: MACTEC CDM Other Names: Shawn Oliveira 2012/17/03 Data Item Cassette 3 Cassette 1 Cassette 2 Index ID CE- 00052 11 BD-001404 Location ID 17/03 House Sample Group Kitchen Location Description Category (circle) FS FB-(field blank) LB-(lot blank) FS FB-(field blank)\LB-(lot,blank) FS FB-(field blank) LB-(lot blank) - Outdoor Matrix Type (circle) Indoor — Outdoor Indoor Indoor Outdoor 25mm 37mm 25mm 37mm 25mm Filter Diameter (circle) 37mm Pore Size (circle) (PCM-0.8) TEM- .45 PCM- 0.8 TEM- .45 PCM- 0.8 TEM- .45 ow Meter Type (circle) (Rotometer) DryCal Rotometer DryCal 'Rotometer DryCal NA Pump ID Number 8911 Flow Meter ID No. 95356-3 Start Date 12/17/03 G 41 Start Time 9.21 -Start Flow (L/min) 12/17/03 Stop Date 1950 -Stop Time Stop Flow (L/min) 9.21 Pump fault? (circle) . Yeş (No) NA NA Yes NA No Yes No  $\sqrt{NO}$ ŃΑ - No Yes MET Station onsite?. Yes Yes NA No NA Sample Type Pre Post Clear Post Clear Рге - Post Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA Field Comments Cassette Lot Number: 32415

For Field Team Completion	Completed by	40	QC by	7 ·
(Provide Initials)	Completed by	ÐU	QC by	10 .

Volpe:

Entered

Archive Blank (circle): Yes No

Validated

Archive Blank (circle): Yes

Validated

Volpe:

Entered

Archive Blank (circle): Yes No

Validated

Volpe:

Entered

QC (Field Team) 🚫

Entered (LFO) No.

Sheet No.: SA- 000164 LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR ld Logbook No: 100305 Page No: 6,7 Sampling Date: 12/17/03 dress: 178 Scenery Rd. Owner/Tenant: Jeff Nelson Business Name: School Roadway Other ( Land Use: (Residential) Commercial Mining Sampling Team: MACTEC (CDM) Other \_\_\_\_\_ Names: \_\_\_\_ Shaura Oliveira ফার্মান্ত্র Cassette 1 Data Item Cassette 2 Cassette 3 Index ID CE- 00053 Location ID BD-001404 Sample Group Basement **Location Description** Category (circle) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) La FS FB-(field blank) LB-(lot blank) ot blank) Outdoor Matrix Type (circle) = Indoor Indoor Outdoor NA Indoor Outdoor 25mm 37mm Filter Diameter (circle) 25mm 37mm 25mm 37mm pre Size (circle) PCM- 0.8 EEM- 45 TEM- .45 TEM- .45 PCM- 0.8 PCM- 0.8 DryCal NA Flow Meter Type (circle) Rotometer DryCal NA Rotometer DryCal NΔ Rotometer Pump ID Number 0387

95356-3 Flow Meter ID No. 12/17/03 Start Date 843 Start Time 9.21 Start Flow (L/min) 12/17/03 Stop Date Stop Time 1952 Stop Flow (Umin) 9.21 No Yes NA NA Pump fault? (circle) Yes No Yes  $(N_0)$ MET Station onsite? Yes NA Νo Yes NΑ No Yes NA Pre -Pre Post Pre Post Post Clear Sample Type Clear-2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear Field Comments Cassette Lot Number: 3み4/5つ Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes QC (Field Team) - 📆 Volpe: Volpe: Volpe: Entered Entered Validated Entered Validated Entered (LFO) Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	ac by

Sheet No.: SA-0001770

#### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Id Logbook No:	100305 Page No: _	6,7 Sampling I	Date: <u>/3/17/03</u>
	178 Senery Rd	Owner/Tenant:Te	eff Nelson
Business Name:	NA		_
Land Use: Residen		9	Other ( )
Sampling Team: MA	CTEC CDM Other	Names: <u></u>	live ind
Data Item	Cassette 1	Cassette 2	Cassette 3
index ID	CE- 00054		
Location ID	BD-801404		
Sample Group	Basement		
Location Description	4	X:2/3/	
Category (circle)	FB-(field blank) LB-(lot blank)	FS .F8-(field blank) LE-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor NA	Indoor Outdoor	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
re Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0689		1
Flow Meter ID No.	95356-3		
Start Date	12/17/03	•	
Start Time	845	o.	
Start Flow (L/min)	9.21 - 5		
Stop Date	12/17/03	2	
Stop Time	1954	0	
Stop Flow (L/min)	9.21	,0	
Pump fault? (circle)	(No) Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	. Pre Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	•Replicate of CE-00053		
Cassette Lot Number: 324/5	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	Completed by	QC by		.
(Provide Initials)	Completed by	400,	· <u>-</u>	:

Sheet No.: D-\_000688 -

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

d Logbook No:	<u> ೧೦೨<i>೦ಽ</i></u> Page No:	7 Sampling Da	te: 12/17/03
rodress:	78 Scenery Rd.	Owner/Tenant: Jef	Nelson
Business Name:	<i>JA</i> _		
Land Use: Residentia	School Commercia	al Mining Roadway	Other ( )
Sampling Team: MAC		_ Names: <i>Shawn Oliv</i>	reira
Data Item	50121.703 Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00055		
Location ID	BD-001404	7,00	
Sample Group (circle) (Subgroup of the property)	Garage, Flouse Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other
Location Description	Basement Ground Floor	Basement, Ground Floor,	Basement, Ground Floor,
(circle)	Second Level	Second Leve	Second Level
(Detailed description point within the location)	Other	Other	Other
Matrix Type (circle)	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-Neld blank) LB-(lot blank)	FS FB-(field blank, LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 /200 300 NA.	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	626583	1	\
Flow Meter ID No.	B-1610 5-1521		
Start Time	1530 1533 1536	1539	
Start Flow (Umin)	2.0 20 2.0	2.0	
Stop Time	1532 1535 1539	1541	
Stop Flow (L/min)	20 20 20	2.0	
Pump Fault? (circle)	No Yes	No Yes	No Yes
Field Comments	100 cm² (round Level garage entrance Herology 100 cm² (round Level	100 cm² Basement, concrete ther hereath entrance to crawls pace	100 cm <sup>2</sup>
Cassette Lot Number:	100 cm² crown Level horizontal surface	100 611	100 cm²
<u>23802</u>	100 cm² Ground Level frontentranie curpet	100 cm	100 cm²
<b>J</b>	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated
··-— <del></del>			

For Field Team Completion	•	
For Field Team Completion	:Completed by	lacty in
(Provide Initials)		

12/17/03 " JEH Nelson Volpe/EPA Author: Shown Oliveira Activity: Post Cleanup Evaluation Sampling. at 178 Scenery Rd. BD#001404. Stationary Air and Dust Samples will be collected per SAP Addendum, PCE Sampling, CSS 12/1/03. Dry Cal B-1610, 5-1521 usedto calibrate low Vol pump used for Dust samples. Equipment Ref pa 48 of this book. 825 Arrive ouside, Mrs. Nelson present. 841 CE-00052 started, placed on pump and precalibrated Ref FSDS SA 000163. 843 CE-00053 placed on pump , precalibrated and started. Ref FSDS SA-000164. 845 CE-00054 placed on pump precalibrated, and started Ref FSDS SA-0001670. Replicate of CE-00053.

857 Depart Site. 1145 Arrive at site. Perform flow and filter checks on CE-00052, 53, 54. All ok. 1155 Depart Site. 1500 Arrive onsite, resident will be back in 10 minutes. 1512 Perform flow + filter checks on CE-00052, 53,54. Alloki

beff Nelson Author: Shawn Oliveira 12/17/03 Volpe EPA PostCleany Evaluation Sampling. 1518 Complete P.I.F. 1541 Dust Sample CE-00055 collected, capped, and sealed. Ref FSDS D-000088. 1550 Departsite. 1800 Arrive onsite Perform flow of ilter checks on CE-00052,53,54. Allok. 1945 Arrive onsite. 1950 CE-00052 collected, post-calibrated, and sealed. Ref FSDS SA-000163. 1952 CE-00053 stopped, post-calibrated, and sealed. Het FSDS 5A.000164. 1954 CE-00054 stopped, post calibrated, and sealed Ref FSDS SA-000170. 2014 Departsite.

#### 52 Pearl St

Field Logbook No.: 100305	Page No.: / 6 - / / Site Visit Date:	1/16/04
Address: 52 Rucl St.	Structure Description.	House
Occupant: Brothers		Number: 293-5706
Owner (if different than occupant): 52	Phone i	Number: 5444 C
Business Name: ~/4		·
Sampling Team: PARANA		<u> </u>
Field Form Check Completed by (100% o	of forms): MD p5	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: 05/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
-	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
<u> </u>	None Other:	<u>'</u>
Interior cleaning conducted during removal	(Yes No	
	If Yes, which floors:	
	Basement Ground Second	
:	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	
	Other:	:
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	_
	Stockpile Yard None	
· ·	Other:	
	Outer.	

Data Item	Value	· Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	Will Recieve HEPA Vuc today
	Immediately 1 to 2 months	
· ·	3 to 4 months 5 to 6 months	-
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month  Once a month  Once a month	Did not recieve
	Less than once a month Other:	Vac 927
Heating Source	Wood/Coal Electric Propane/Gas Other: Full Oil	
Heat Distribution	Forced air Radiant - Other:	
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	None	To be completed by field personnel:  Do these properties currently have indoor or outdoor vermiculite?  —
Addresses or names of business where occupants work	Retired	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
, ~ . <u></u> -	· –	
ADDITIONAL INFORMATION		
<del></del>	<del></del>	<u> </u>

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No:		Sampling E	Date: 1/16/04
lress: <u>52 Pc</u>	arl 5t.	Owner/Tenant: Bro	thers
Business Name:	NIA		
Land Use: Residen		3	Other ( )
Sampling Team: MA	CTEC CDM Other	<i>a</i>	
<b>5.</b> "	V10116604	101116/04	////6/04 Cassette 3
Data Item .	Cassette 1	Cassette 2	Cassette 3
Index ID		<b>)</b> /	
-	CE- 00065	CE- 00066	CE- 00067
Location ID	BB-002374	BD-002374	80-002374
Sample Group	House	House	House
Location Description	Basement	( 11.1	2nd level
,	Bedroom	tray living Room	Hallway
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 CM- 0.8	TEM- ,45 PCM- 0.8	TEM45 PCM- 0.8
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0841	05913	0387
Flow Meter ID No.	92045-1	92045-1	92045-1
Start Date	1/16/63/04	1/16/00 04	1/16/63 04
Start Time	0849	0851	0853
Start Flow (L/min)	9.01	9.01	9.01
Stop Date	1/16/8804	1/16/5 04	1/16/04
Stop Time	2005	2009	2014
Stop Flow (புmin)	9.01	9.40	9.21
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA .
MET Station onsite?	(No) Yes NA	No Yes NA	No Yes NA .
. Sample Type	Pre Post Clear	Pre Post Clear	Pre Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Glear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments –			 
Cassette Lot Number:			
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
C (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

	T		
For Field Team Completion	Completed by $GY$	- 1	QC by
(Provide Initials)	Completed by C41		

000103

		 _	-
Sheet No.:	D		

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST
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	Page No: <u>/</u>		ite:
	earl_5t	Owner/Tenant: Bc+	465
Business Name:	NIA	- Dodd -	04.554
Land Use: Residentia		, , , , , , , , , , , , , , , , , , ,	Other ( )
Sampling Team: MAC	TEC CDM Other	Names: PARANA	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00068		7
Location ID	BB-002374		
Sample Group (circle)	Garage, House, Shed,	Garage, House,/Shed,	Garage, House, Shed,
(Subgroup of the property)	Pump House	Pump House	Pump House
	Other	Other	Other
Location Description	Basement (Ground Floor,	Basement, Ground Floor,	Basement, Ground Floor,
(circle)	Second Level	Second Level	Second Level
(Detailed description point within the location)	Other	Other	Other
are rocaucity	Horizontal Surfaces	Horizontal Surfaces -	Horizontal Surfaces
Matrix Type (circle)	Fligh Traffic Areas	High Traffic Areas	High Traffic Areas
	Other	Other	Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 / 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25m/m 37mm	25mm / 37mm
Pore Size (circle)	JEM45) PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer (Dry-Cal) NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump (D No.	612058	L	
Flow Meter ID No.	R1610 - 51521	1/11/04	
Start Time	1448 1452 1455	1458 1502 1505	
Start Flow (L/min)	7.0 20 2.0	2.0 2.0 2.0	
Stop Time	1450 1454 1457	1500 1504 1507	
Stop Flow (L/min)	2.0 2.0 2.0	7.0 2.0 7.0	
Pump Fault? (circle)	No -Yes	No Yes	No Yes
Field Comments	100 cm² Living Room	100 cm² pt hot water	100 dm <sup>2</sup>
· }	entrance	neater	
Canada 1 -t bluet	100 cm2 - Kitchen for	100 cm2 - And level floor	100/cm² //20
Cassette Lot Number:	OT MICHEWAVE	inhallway,	1/1/1/09
<u> </u>	100 cm² - Basement	100 cm2- 2 -d/eve/ N.	100 cm <sup>2</sup>
	floor chase of	Bedroom. Top of dresser	1.
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	EnteredValidated

For Field Team Completion (Provide Initials)

QC by

10\_ 52 Pearl St. Brothers 1/16/04 52 Rail St-Brothers 1/16/04 PCE-EPA/Volpe Gregory Paranson PCE-EPAI Volpe Anthor: Gresory to Activity: Stationary air and 1710 Onsite Filter/ Flow ck-OK dust samples will be collected 2000 Onsite. as part of the PCE. Sampling 1,112000 2005 CE-00065 stopped, post calibrated. will be conducted in level D PPIE IAW SAP Addendum CSS. 2009 CE-00066 5topped, post PCE 12/1/03. Equipment Ket calibrated. 10116104 13 48 of this losbook. 0840. 2014 CE-00067 stopped, post Onsite e 52 Pearl St. colibrated All samples decontaminated offsite CE-00065 the-calibrated with Rotometer 92045-1. -- 1 P849 CE-00065 started. 2030 ONSITEC OD 7 Office BILLE -00066 pre-culibrated. Samples lock in sample 0851 CE-00066 started. storage. 2100 offsite out CE-00067 pre-calibrated. of losbook. Ket FSDS SA-000216 D-000103 0853 CE-00067 started Atsite. 1150 Onsite. Flow Ck-OK, Filter Ck-OK. PIF # BD-002374 completed with Mr. . Mrs. Brothers. Offsite ---1435 Onsite. Fifter (K. OK. Flow 1507 CE-00068 (dust) collected. Pump decontaminated. 

#### 123 Hamann Ave

Field Logbook No.: 100305	Page No.: 18 Site Visit Date:	1/29/04
Address: 123 Hamann	Ave Structure Description:	House
Occupant: Cindy Sunderso		Number: 293-3451
Owner (if different than occupant): NA		Number: NA
Sampling Team: Shawn Oliveina	_	
Field Form Check Completed by (100% of	of forms): 10 05	·
	· · · · · · · · · · · · · · · · · · ·	<u>,                                      </u>
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: 10/02
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	!
	Other:	ļ
		<u> </u>
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	None Other: UNKNOWN	
Interior cleaning conducted during removal	(Yes) No	
	If Yes, which floors:	
1	Basement Ground Second	-
 	Garage Attic Other:	<u> </u>
Was carpet removed during removal activities?	Yes (No) NA _	
Location of vermiculite removed outdoors	Driveway (Flowerbed) Garden	•
•	Stockpile (Yard) None	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
cocation of vernincume remaining boldbors		•
	Stockpile Yard None	
-	Other:	

complete vac begin Immediate 3 to 4 more than Aprovided HEPA vacuum?  Heating Source  Heat Distribution  How soon after the removal was a forced air heating source first used?  Complete vac begin Immediate 3 to 4 more than Aprovided HEPA vacuum?  Conce a war Twice a market wood/Coa other:  Forced air Other:  Immediate 3 to 4 more than Aprovemiculite since the removal was	No w long after the removal was d did use of the EPA-issued HEPA ely 1 to 2 months onths 5 to 6 months eek More than once a week nonth Once a month once a month	
has it been used since removal?  If Yes, ho complete vac begin   Immediate   3 to 4 more than    How often do you vacuum with your EPA provided HEPA vacuum?  Twice a magnetic less than   Cother:	w long after the removal was didid use of the EPA-issued HEPA:  ely 1 to 2 months  this 5 to 6 months  eek More than once a week wonth Once a month  once a month	
Heating Source  Heat Distribution  How soon after the removal was a forced air heating source first used?  Have any of the occupants been in contact with any vermiculite since the removal was  Tonce a way of the occupants been in contact with any vermiculite since the removal was  Twice a magnetic through the occupants been in contact with any vermiculite since the removal was	nths 5 to 6 months  a 6 months  eek More than once a week nonth Once a month  once a month	
How often do you vacuum with your EPA provided HEPA vacuum?  Twice a magnetic than the companies of the comp	eek More than once a week  nonth Once a month  once a month	
How often do you vacuum with your EPA provided HEPA vacuum?  Twice a magnetic than the straight of the provided HEPA vacuum?  Twice a magnetic than the straight of the provided HEPA vacuum?  Heating Source  Other:  Heat Distribution  Forced air Other:  How soon after the removal was a forced air heating source first used?  Immediate 3 to 4 more than the provided Have any of the occupants been in contact with any vermiculite since the removal was	eek More than once a week nonth Once a month once a month	
Heating Source  Wood/Coa Other:  Heat Distribution  Forced air Other:  How soon after the removal was a forced air heating source first used?  Immediate 3 to 4 more than  Have any of the occupants been in contact with any vermiculite since the removal was		J
Heating Source  Other:  Heat Distribution  Forced air  Other:  How soon after the removal was a forced air heating source first used?  Immediate 3 to 4 more than have any of the occupants been in contact with any vermiculite since the removal was	<del></del>	
How soon after the removal was a forced air heating source first used?  Immediate 3 to 4 more than Have any of the occupants been in contact with any vermiculite since the removal was	al Electric Propane/Gas	
air heating source first used?  3 to 4 mor more than  Have any of the occupants been in contact with any vermiculite since the removal was	Radiant	-
with any vermiculite since the removal was	oths 5 to 6 months 30/0%	
completed?	No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	· · · · · · · · · · · · · · · · · · ·	To be completed by field personnel: Do these properties currently have indoor or autdoor vermiculite?
Addresses or names of business where occupants work	· · · · · · · · · · · · · · · · · · ·	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
<u>-</u>		
ADDITIONAL INFORMATION		

Sheet No.: SA- 600237

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Eield Logbook No:	/00305 Page No: _	/子 Sampling [	Date:/29/04
dress:13	3 Hamann Ave	Owner/Tenant: <u>Lind</u>	ly Soudenson-Smith
Business Name: _4/4	4		7
Land Use: Residen		,	•
Sampling Team: MA	CTEC CDM Other		veira
Data Item	Cassette 1	So 1/29/04 Cassette 2	Cassette 3
Index ID	CE- 00059	CE- 00060	
Location ID So /45	BD- 004341	BD- 004341	
Sample Group	House Living Room	House Muster Bedroom	
Location Description	Living Room	Master Bedroom	
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm/
Pore Size (arde)	TEM45 (PCM- 0.8)	TEM45 PCM- 0.8	TEM- 45 PCM-08
ow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCall NA
Pump ID Number	05910	05912	6
Flow Meter ID No.	006196	006196	W.
Start Date	1/29/04	1/29/04	
Start Time	842 -	546	
Start Flow (L/min)	9,19 50 102,	9,19	
Stop Date	1/29/04	1/29/04	1/3
Stop Time Sulpake	9.19 50 19	2059	<i>A</i>
Stop Flow (L/min)	9.19 50 19	9.19	
Pump fault? (circle) _	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	(No. Yes NA	No /Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre / Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	· Wood stove in use	-	-
	· Resident smoking		/
Cassette Lot Number:	<b>'</b>		/
310201	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	,Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
<u> </u>			

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Sample Area (cm²) (circle) 100 200 300 NA 100 200 370 NM Pere Size (circle) Rotometer Ory-Cal NA Rotometer ID No. 8-1610 5-1521 NA Rotometer Ory-Cal NA Rotometer Ory	Id Logbook No: 10	03 <i>05</i> Page No:	18 Sampling Da	te:
Business Name: All School Commercial Mining Roadway Other ( )  Sampling Team: MACTEC CDM Other Names: Shaum Olive or Names: Name	.dress:	3 Hamann Ave	Owner/Tenant: <u>Cindu</u>	Sanderson-Smith
Data Item   Sc 1/31*Cassette 1   Cassette 2   Cassette 3	Business Name: NAM	1	_ <del></del> ~	•
Data Item   Sc   ST Cassette 1   Cassette 2   Cassette 3			_ ,	` ,
CE- 00115   CE-	Sampling Team: MAC	TEC CDM Other	Names: Shawy Olive	· <u>va</u>
BD- 004341  Sample Group (circle) (Subgroup of the property) Cicrcle) (Circle) (Detailed description of the circle)  Altrix Type (circle)  Sample Area (cm²) (circle)  Sample Area (cm²) (circle)  Sample Area (cm²) (circle)  Sample Area (cm²) (Detailed description of the circle)  Sample Area (cm²) (circle)  Sample Area (circle)  S	Data Item	So i self Cassette 1	Cassette 2	Cassette 3
Sample Group (circle) (Subgroup of the property)  Location Description (circle) (Circle) (Desired description point within the location)  Matrix Type (circle)  Ategory (circle)  Ategory (circle)  Filter Diameter (circle)  Filt	Index ID	CE- 00115		
Pump House Other   Pump House Other   Pump House Other   Oth	Location ID	BD- 004341		
(circle) (Detailed description point within the location)  Matrix Type (circle)  Aligh Traffic Areas Other  Ategory (circle)  Ategory (cir	1 ' ' ' '	Pump House	Pump House	Pump House
Horizontal Surfaces	(circle) (Detailed description point within	Second Level	Second Level	Second Level
Sample Area (cm²) (circle) 100 200 300 NA 100 200 NA 100		High Traffic Areas	High Traffic Areas	High Traffic Areas
Filter Diameter (circle)   C5mm   37mm   25mm   2	ategory (circle)	FS FB-(field blank) LB-(fot blank)	FS FB-(field blank) LB-(lipt blank)	FS FB-(field blank) B-(lot blank)
Pere Size (circle) (EM- 45) PCM- 0.8 TEM- 45 PCM- 0.8 TEM- 45 PCM- 0.8 .  Flow Meter Type (circle) Rotometer (Dry-Cal) NA Rotometer (Dry-			100 200 300 NA	100 200 300 NA
Flow Meter Type (circle)   Rotometer   Ory-Cal   NA   Rotometer   Ory-Cal	Filter Diameter (circle)	25mm 37mm	25mm 37mm \	25mm 37mm
Pymp ID No.	Pere Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0 8
Start Time	Flow Meter Type (circle)	Rotometer Dry-Cal NA		Rotometer Dry-Cal NA
Start Time	Pump ID No.	612767	1/2	- }
Start Flow (L/min)   2.0   2	Flow Meter ID No.		- Xe4 /	
Start Flow (L/min)   2.0   2	Start Time	1501 1503 1505	1507	
Stop Flow (Umin)   2.0	Start Flow (L/min)		2:0	
Stop Flow (L/min)  2.0 2.0 2.0 2.0  Pump Fault? (circle)  No Yes  No Yes  No Yes  Field Comments  100 cm² · Front entranæ     · + i le, ground level     · 2 nc Level  Cassette Lot Number:     · ground level     · ground level     · 23802  100 cm² · Top of stairs     · 2 nc level  Archive Blank (circle): Yes No Archive Blank (circle): Yes No  Archive Blank (circle): Yes No	Stop Time			
Field Comments  100 cm² · Front entrance     · tile, ground level     · tile, ground level  100 cm² · Horizontal Surf. 100 cm²  Archive Blank (circle): Yes No Archive Blank (circle): Yes No	Stop Flow (⊔min)	·· — -: ·· 구 · —	2.0	
Cassette Lot Number:  - 23802  100 cm² - Horizontal Surf ground level  100 cm² - Top of stairs - 2 nd level, carpet  Archive Blank (circle): Yes No Archive Blank (circle): Yes No	Pump Fault? (circle)	No Yes	No Yes	No Yes
Cassette Lot Number:  - 23802  100 cm²-Top of stairs - 2 nd level, carpet  Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes No	Field Comments	100 cm². Frontentrance · tile, ground level		100 cm <sup>2</sup>
Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes No		·ground level	100 cm <sup>2</sup>	100 cm <sup>2</sup>
	- <u>23800.</u>	100 cm²-Top of stairs dollers, carpet	100 cm <sup>2</sup>	100 cm <sup>2</sup>
Entered (LFO) Volpe: Entered Validated - Entered Validated Validat		Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
	Entered (LFO)	Volpe: Entered Validated - +	Entered Validated	Entered Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	Lac by

18 12 Hamann Ave Cindy Souderson-Smith 1/29/04 PCE EPA/Volpe Author: Shown Oliveira Activity: Stationary Air and Dust samples will be collected as part of the P.C.E .. Sampling will be conducted in Level D PPE, IAW SAP Addendum CSS, ACE Sampling. 835 Arrive onside, resident present. CE-00059 (Ground Level) set up and pre-calibrated. 840 CE-00059 started. Wood stove in use. 842CE-00060 (2nd Floor) set-up and pre-calibrated 843CE-00060 started. 50 848 Offsite. 1130 Arrive onsite. Flow check ok, filtercheck ok. 1458 Arrive onside Flow check ok, filtercheck.ok. 1501 CE-00115 collected. (Aost) 1756 Arrive onsite. Flow check ok, filter check ok. 2045 Arrive onside. ,2051 CE-00059 stopped, post calibrated, and collected 2059 CE-00060 stopped, post cali braded and collected. 2107 Return to CDM, lock samples in storage. Ref FSDS's; SA-000237, D-000120.

PCE-EPA/Valpe Author: Shawn Oliveira Activity: Stationary Air and Dust samples will be collected as part of the P.C.E. Sampling will be conducted in Level DPPE, IAW SAP Addendum CSS, ACE Sampling. 827 Arrive onsite, resident present. CE-00121 setup and pre-calibrated. 841 CE-00121 started. 943CE-00122 set up, precali broded and started. 845 CE-00123 set up, precalibrated and started duplicate of CE-00122. 847CE-00124set up, pre-calibratel, and started. 852 Complete PIF with resident, 11/15 Arrive onside, flow check ok, fillercheck ok. 1140 CE-00125 (Dust) collected. 1506 Arrive onsile flow checket, fillerchecket. 2038CE-00121 stopped, post calibrated, and collected. 2040 CE-00122 stopped, post calibrated, and collected. 2041 CE-00123 stopped, post calibrated and collected. 2042CE-00124stopped, post-calibrated, and collected. 2000 Complete equipment NON, departsite. 2057 Keturn to CDM, lock samples in storage. Ref FSDS'S SA-000190, SA-000271, D-000135-

1/30/04 Alexa Olivini

10030b

"Lite in the Pains "
ALL-WEATHER WRITING PAPER

#### **TRANSIT**

All-Weather Notebook
No. 301

Libby Asbestos Project
Post Evalual Cleanup-Evaluation
12/15/03 to 2/2/01

4 5/8" x 7" - 48 Numbered Pages

1777 Parameter

"Lite in the Rain"
ALL-WEATHER WRITING PAPER

Libby Asbestos Project CDM/Mactec Contractor Logbook

Return to: Dave Schroeder . 318 Louisiana Avenue Libby, MT 59923 406-293-8595

#### Every Page:

- > Initial and date all pages
- > Sign and date last entry of the day
- > Line out once, initial and date all changes
- > NO blank lines

#### Daily Entries:

- > Author
- > Date/Time
- > Weather
- > Activities
- > Persons on team
- > Level of PPE
- > Title of governing document
- > Serial numbers of equipment

CONT	ENTS
------	------

PAGE: REFERENCE : MTE

2-3 1306 Louisiana -- Shiflett 12/15/03

4 653 Flower Creek Rd. 1116/04

6 240 W. Farch St. 1/17/04

1 214 W. Larch St. 2/2/04

### 1306 Louisiana Ave

BD# 000299

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100306 F	Page No.: <u>23</u> Site Visit Date:	12/15/03
Address: 1306 Louisians F	Structure Description:	House
Occupant: William Shiflet		Number: 293-4963
Owner (if different than occupant): 1/1/1	Phone i	Number: <u>//A</u>
Business Name:	<u> </u>	
Sampling Team: Shown Olivein		• ,
Field Form Check Completed by (100% of	of forms): 10 P3	· · · · · · · · · · · · · · · · · · ·
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: 4/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	[
ŕ	Crawl Space Basement Sub-floor	
<b>-</b>	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	-
	None Other:	
Interior cleaning conducted during removal	Yes No	,
	If Yes, which floors:	
' <u></u> .	Basement Ground Second	
·	Garage Attic Other:	
Was carpet removed during removal activities?	Yes (No) NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	. "
	Other:	•
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	
	Other:	<b>_</b>

Data Item	Value	· Notes
Pre-Sampling Interview (To be completed	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
	Immediately 1 to 2 months	
•	3 to 4 months 5 to 6 months	
· <u></u>	more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  More than once a week  Twice a month  Once a month	
,	Less than once a month	
	Other: Not received yet	
Heating Source	Wood/Coal Electric Propane/Gas  Other: Oil	
Heat Distribution	Forced air - Radiant	
<del></del>	Other:	
How soon after the removal was a forced air heating source first used?	(Immediately) 1 to 2 months 3 to 4 months 5 to 6 months	Within Iweek.
	more than 6 months	
lave any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
addresses of other homes or properties the occupants visit and may contain ermiculite	Unknown	To be completed by field personnel Do these properties currently have indoor or outdoor vermiculite?
<del>.</del>	<u>-</u>	-
ddresses or names of büsiness where ccupants work	Retired	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
-	·	
DDITIONAL INFORMATION	·	

#### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No:	<u> 100306</u> Page No: _	Sampling I	Date: <u>12/15/03</u>
tdress:	1306 LOUISIANA AU	eOwner/Tenant: <u>Willia</u>	m Sh. EGlett
Business Name:	_NA		
Land Use: (Residen		<u> </u>	•
Sampling Team: MA	, <del></del> ,	Names: <u>Shawa_Ol</u>	iveira
Data Item	30 12 13 103 Cassette 1	60 13 1.5 03 Cassette 2	Cassette 3
Index ID	7	<b></b>	
 	CE- 00043	CE- 00046	
Location ID	BD-00029 <b>9</b>	80-000299	
Sample Group	House	Blank	
Location Description	Living Room	N/A	
Category (circle)	(FS) FB-(field blank) LB-(lot blank)	FS (FB) field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	(Indoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 (PCM- 0.8)	TEM45 (PCM- 0.8)	TEM45 PCM- 0.8
ow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal (NA)	Rotometer DryCal NA
Pump ID Number	0689	N/A	
Flow Meter ID No.	95356-3		
Start Date	12/15/03		-
Start Time	904 1154 1547		
Start Flow (L/min)	9.21 9.21 9.21		
Stop Date	12/15/03		
Stop Time	1153 45206 23 2006		
Stop Flow (Umin)	9.21 9.21 9.21	2/10/03	
Pump fault? (circle)	No Yes NA	No Yes (NA)	No Yes NA
MET Station onsite?	No Yes NA	No Yes (NA)	No Yes NA
Sample Type	Pre Post Clear	Pre - Post Clear	Pre Post MClear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Glear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear / 3 <sup>rd</sup> Clear / NA
Field Comments -	_		JP12/11/13
Cassette Lot Number:		-30 12/16/03	
32.415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes (No)	Archive Blank (circle): Yes No
QC (Field Team) <u>YU</u>	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	QC by

Sheet No.: D- 000083

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Field Logbook No:									<del></del>
dress:		OU SICLA	A AVE	Owne.	ار بر براد الماد الم	ll /Au/		<u>#</u>	<del></del>
Land Use: (Residenti		hool	Commercia	al Min	ing Roadwa	 21/	Other /		1
Sampling Team: MAC					_	•	•		,
Sampling Team. MAC	-	_ , , _		_ 14811163		استفل د )	<u>vc</u>		
Data Item	\$€ 1.	Casset	te 1		Cassette 2			Cassette :	3
Index ID	CE	- 0004	15			2_			
Location ID	BD	-0002	99		/	,	!		
Sample Group (circle)	Garage,	House S	hed,	Garage,	House, Shed,		Garage, H	louse, Shed	,
(Subgroup of the property)	Pump He			Pump Ho	/		Pump Hou	1	
· · · · · · · · · · · · · · · · · · ·	Other			Other			Other	<del></del>	<del></del> -
Location Description	Basemer	nt Ground	Floor,	Basemer	nt, Ground Floor,	_	Basement	, Ground Flo	oor,
(circle)	Second I	Level		Second l	.evel /		Second Le	:vel	
(Detailed description point within the location)	Other	<del></del>		Other	<del></del>		Other	<del> </del>	
(rie locatori)	Horizont	al Surfaces	>	Horizonta	al Surfaces		Horizontal		
Matrix Type (circle)		ffic Areas		High Trai	ffig Areas		High Traffi	,	
	Other			Other		Other			
tegory (circle)	FS FB-(	field blank)	LB-(lot blank)	FS FB	field blank) LB-(lot b	lank)	FS FB-(f	eld blank) LB-	(lot blank)
Sample Area (cm²) (circle)	100	200 3	00 NA	100	200 300	NA	100 20	300	NA
Filter Diameter (circle)	(25mm)	37m	м	25m/m	37mm		25mm	37mm	
Pore Size (circle)	TEM45	) PCM	I- 0.8	T₽M45	PCM- 0.8		TEM45	PCM- 0.	8
Flow Meter Type (circle)	Rotomete	r (Dry-	Cai). NA	Rotomete	- Dry-Cal I	NA	Rotometer	Dry-Cal	NA
Pump ID No.	636387	610	5 15 21	5013/15/0	3 Thorn	7-			
Flow Meter ID No.	B-161	_		شنت	1912/16	ادمر			
Start Time	1554	1557	1600	1604					
Start Flow (L/min)	30	3.0	20	20			<u>!</u>	<u> </u>	<del></del>
Stop Time	1556	1559	1602	1600	6.01	/_			
Stop Flow (L/min)	30	2.0	2.0	2.0	P12/16	103			
Pump Fault? (circle)	<u>@</u>	Yes		No	Yes		No .	Yes	
Field Comments		ront Ent expet	nasię –	100 cm²			100 cm <sup>2</sup>	- G	1 - 11 -
Cassette Lot Number:	100 cm² p	keck Ent worlt	anie	100 cm <sup>2</sup>	/ 0/ ,		100 cm <sup>2</sup>		₹//463
<u> 324/5                                     </u>			Sylais	100 cm <sup>2</sup>	10,2/16/0	3	100 cm²		
	100cm <sup>2</sup> /3 Archive Bla	ر معالم nk (circle):	rpets Yes No	Archive Blaz	nk (circle): Yes No	- 1	<u>Archive</u> Blank	(circle): Yes	No
Entered (LFO)		ered			Validated			Validated	-
							<del></del> 1		

For Field Team Completion	Completed by	QC by	
(Provide Initials)	Completed by	QC by	

#### Residential Activity Log

Resident Address: 1306 LOUISIANA AND LIBBY

Volunteer Name: WILIAM & JOANNE Shiffert

Sampling Date(s): 13-15-03

Personal air sample number (s): Stationary Air - CE-00043

FSDS number(s): 54-000144 D-000083

Date/Time Interval	Go Outside?	Pump problem?	General Activities
11-15-03 11.50 AM 1450 PM	No Yes ([ #//mins) Describe	No Yes (describe)	DUT FOR COFFEE
05 de 05 de 70 730	No Yes (夕道 mins) Describe	Yes (describe)	EPH MEATING
	No Yes ( mins) Describe	No Yes (describe)	-
-	No Yes ( mins) Describe	No Yes (describe)	-
	No Yes ( mins) Describe	No Yes (describe)	<u>-</u>
	No Yes ( mins) Describe	No Yes (describe)	

Note: Continue on second page if necessary.

2 Iliam Shiflett Author: Shawn Olivera 12/15/03 Tolo Louisiana Volpe/EPA Post Removal Evaluation. Activity: Post Removal Evaluation Sampling at BD-000299, 1306 Louisiana Ave. Stationary Air and Dust Samples will be collected in accordance with the SAP Addending PCE Sampling, 12/1/03 Dry Cal B-1610 5-1524 used to calibrate low volume sampling pump for Dust sampling. Equipment reference pg 4 of this book 850 Arrive onsite, Mr.+Mrs. Shiflett present. 857 Set-upandcalibrate CE-00043. 904 Start CE-00043 on Pump # 0689. 915 Depart Site. 1153 Arrive Onsite Flowcheck CE-00043 ok. Some discoloration on the filter. Residents are smoking heavily. 1159 Depart Site. 1546 Arrive at Site Flowcheck CE-00043, ok. Filter discolored Residents still smoking. Complete P.I.F. Resident will receive HEPA Vac this afternoon. 160ACCOllect Dust Sample CE-00045, capped, and sealed. Refer to FSAS A-000083. 1615 Depart Site Than line

William Shiflet Author: Shawa Olivein 1306 Louisiana Volpe/EPA 12/15/0 2002 Arrive at site, Mr. + Mrs. Shiflett present. 2006 CE-00043 Stopped, post-calibrated and sealed. Filteridark with Ligsmoke Ref. FSDS SA-000144. 2008 CE-00046. Blank Pet FSDS SA-000144 2010 DCON equipment departsile. 2040 Appenwork 2045 Leave office. T

#### 653 Flower Creek Rd

BD# 003/03

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100 30 6  Address: 65.3 Flower C  Occupant: Racy ead D  Owner (if different than occupant): Business Name: NMA  Sampling Team: PARANA - CD	oris Brown Phone  Same Phone	
Field Form Check Completed by (100% o		· · · · · · · · · · · · · · · · · · ·
Data Item	Value	- Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	te Removal Completed: <u>10 0 3</u>
Location of vermiculite removed indoors	Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:	None inside
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  None Other:	None remaining
Interior cleaning conducted during removal	Yes No  If Yes, which floors:  BasementGround Second  Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden  Stockpile Yard None  Other:	<del>-</del>
Location of vermiculite remaining outdoors	Drīveway Flowerbed Garden Stockpile Yard None Other:	

	Value	Notes
Pre-Sampling Interview (To be complete	ed with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Ves No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	Reine Recieved 14E.7A vac 1/10/0
	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  More than once a week  Twice a month  Cess than once a month	
Jantina Causa	Other: Wood/Coa/ Electric Propane/Gas	- · · · · · · · · · · · · · · · · · · ·
Heating Source	Other:	
leat Distribution	Forced air Radiant . Other:	in the
low soon after the removal was a forced ir heating source first used?	Immediately 1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	Air hesting pre
ave any of the occupants been in contact ith any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties here the occupants visit and may contain ermiculite	6356 Pipe Creek Rd. Sons House in Kalispell	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where cupants work	None Plummer Shool ASA Wood School Central School	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?

Sheet No.: SA- 000215

### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: _/	70030 Page No: _	4-5 Sampling D	Date:
dress: <u>653 F</u>	lower Creek Reb	Owner/Tenant: <u>\$70 w</u>	<u> </u>
	VIA	Total Design	O467
Land Use: Residen Sampling Team: MA		•	Other ( )
Camping ream, wa	1 /5 //16/04	Names: <u>PARANA</u>	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	V -	<u> </u>	
	$oxed{1}$ CE- 00063 $oxed{-}$	CE- 00064	
Location ID	BD-003103	BD-003103	72
Sample Group	House	House basement	1/3404
Location Description	Ground level	Busement - Center	
	Hallway	- Center	
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS B-(field blank) LB-(lot blank)	FS F8-(field blank) LB-(lot blank)
-Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm /37mm
Pore Size (circle)	TEM45 (PCM- 0.8)	TEM45 (PCM- 0.8)	TEM45 / PCM- 0.8
ow Meter Type (circle)	(Rotometer) DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0689	0891-A	
Flow Meter [D No.	92045-1	92045-1	į,
Start Date	1/16/04	1/16/04	/
Start Time	0825	0827	<u> </u>
Start Flow (L/min)	9.01	2.01	
Stop Date	1/16/04	1/16/04	,
Stop Time	1940	1946	
Stop Flow (L/min)	9,40	9.20	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No: Yes NA
Sample Type	Pre - Post Clear	Pre Post Clear	~Pre Post Clear .
·,	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA ')	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear - NA
Field Comments			16108
Cassette Lot Number:			
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes_ No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	Completed by	ас ву
(Provide Initials)	Completed by	l de by

		_	_	_	
Sheet No.:	D				•

ress:		<u>,                                    </u>		_	r ronant.		<i></i>	·	<del></del>
and Use: Residentia Sampling Team: MAC	) Sci	-	Commercia er		•	Roadway ANA	Other (		)
Data Item /	1117		<del></del>		Cassett		Pilit	assette	3
index ID	CE-	0006	9			7	CE-	00070	<del></del>
Location ID	BO	-0031	03	80	-0031	03	BI	0-00	3103
Sample Group (circle) (Subgroup of the property)		House Si		Garage, Pump Ho Other	House, Si Duse	ned,	Garage H Pump Hou Other	louse. She	
Location Description (circle) (Detailed description point within the location)	Basemer Second I Other	nt, Ground Level	Floor	Basemer Second I Other	nt, Ground Level	l Floor,	Basement, Second Le	vel	loor,
Matrix Type (circle)		al Surfaces ffic Areas		1	Surfaces ic Areas		Horizontal High Traffic Other	Areas	
tegory (circle)	FS B-(field blank) LB-(lot blank)			FS FB-(field blank) LB-(lot blank)			FS FB-(field blank) LB-(lot blank)		
Sample Area (cm²) (circle)	100	200 3	900)A	100	200 3	00 NA	100 20	0 300	NA
Filter Diameter (circle)	25mm	37mi	m	25mm	37m	m	25mm	37mm	
Pore Size (circle)	TEM45	) РСМ	- 0.8	TEM45	РСМ	I- 0.8	TEM45	PCM- (	0.8
Flow Meter Type (circle)	Rotomete	er (Dry-C	Cal NA	Rotomete	r Dry-0	Cal NA	Rotometer	Dry-Cal	(NA)
Pump ID No.		1205	8	7 -		4	NIA		7
low Meter ID No.			5 (52)	<u></u>		1/16/0	4		<u></u>
Start Time	1418	1423	1728	1431		-7_			<u> </u>
Start Flow (L/min)	2.0	2.0	2.0	2.0				. —	<del> </del>
Stop Time	1420	1425	1430	1433		1 1/11/-	<del></del>	<i>/</i>	14 / /24/
Stop Flow (L/min)	2.0	2.0	2.0	2.0		p1/16/04		-/0	11.664
Pump Fault? (circle)	(No)	Yes-		No	Tes/		No	Yes	<u> </u>
rield Comments	100 cm² <sup>1</sup>	Kitche	n floor		Basem Freez	ent-	100 cm²		-
Cassette Lot Number:	100 cm <sup>2</sup>	hiving and Basem	Room	100 cm <sup>2</sup>		<u></u>	100 cm <sup>2</sup>		1
	Floo		ENT	, indicate		ļ	100 cm²		161660
'		nk (circle):	Yes No	Archive Bla	nk (circle):	Yes No	Archive Blank		No 1/2
intered (LFO)		tered			Valid		Entered		

For Field Team Completion (Provide Initials)

Completed by

 $\mathcal{U}$ 

іас ьу

12

653 Flower Creek Rd. - Brown 1/16/04 PCE-EPA/ Volpe Author: Gregory Parana Activity Stationary Air and dust sumples will be collected as palt of the PCE. Sampling will be conducted in level DPPE IAW SAP, Addendum, CSS, PCE 12/1/03. Equipment: 3 high volume sampling pumps. 2 low volume sampling pumps, tyson, Cassette stands, 0.8 um PCM casse Hes 0.45 um microvacuum dust cassettes, 10×10 cm Templates, bassies, Roto. meter 92045-1, Dry Cal B1610-515), Decon wipes. 0820 Onsite. CE-00063 pre-calibrate. 0825 CE-00063 started: (3) CE-00064 pre-calibrated. 0827 CE-00064 started. Offsite to 52 ituil 5t. ----1130 ONSITE Filter CK-OK. Flow CK. OK. PIF BD 003103 completes with Barry and Doris Brown. 1415 Onsite. Filter CK-Filter loading with wood smoke- Woodheat. 1433 (E-000 69 (Dust) collected. 170 11W04

PCE-EPA/Volpe Authol: Grassytan CE-00070 - Blank exposed. All samples (dust) sealed. Resident not present. - 10 1650 ONsite Filter CK-OK Looded with wood smoke. Flow Ck - OK. Offsite. 1940 CE-000 G3 stopped, post calibrated and scaled 1946 CE-00064 stopped, post calibrated and scaled Late Entry. 0800 - LV pump 612058 culibrated to Dry Cal B1610 -SISAI prior to day's sampling. 2030 Owsite CDM office. All equipment was decontaminate at the site. Samples locked in sample storage @ CDM Office Ref FSDS D-000104 SA-000215. Out of losbook C 2100. 1116/04

### West Larch Street

240 W. Lurch St. - Reisman 1/17/04 PCE-EPAl Volpe Authors Grayon Parana Activity: Stationary Air and dust samples will be collected as part of the PCE. Sumpling will be conducted in level D PPE IAW Philiplus SAP, Addendum, CSS, PCE Sumpling 12/103. Ret ps 4 for equipment. Rotometer 42045-1 used to calibrate samples, 0825 Ousite CE - 00071 pre-calibrates. CE-00072 pre-culibrated. CE-00072 field replicate of CE-00071. 0836 CE-00071, 72 started. Offsite. 1130 Onsite. Resident, David Steele unplussed pumps and stated that they were to worsy. He despulsion said to take them out of his house and that he does notwant to participate. 1200 Out of losbook FSDS SA -000235 voided, fry ULITOY

### 214 W. Larch

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Lagbook No.: 100306	Page No.: 7-8 Site Visit Date:	2/2/04
Address: 214 W. Lurch St	Structure Description	House
Occupant: Ani + Chad De		Number: 293-5494
Owner (if different than occupant):		Number: Uakara
Business Name: N/A		<del></del>
Sampling Team: PARANA - CDM	1	
Field Form Check Completed by (100% of	of forms): \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Data Item	· Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Da	te Removal Completed: <u>05/0</u> ろ
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other:	
Location of vermiculite remaining indoors	Attic (Walls interior or exterior)	
	Crawl Space Basement Sub-floor	
	None Other	
		<u> </u>
Interior cleaning conducted during removal	Yes No	}
	If Yes, which floors:	
(	Basement Ground Second	
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	_
·- ,	Stockpile Yard (None)	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	-
	Stockpile Yard None	
_ ··· ··· · · · · · · · · · · · · · · ·	Other	
		<u> </u>

Data Item	Value	Notes
Pre-Sampling Interview (To be completed	with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
	Immediately 1 to 2 months	
	3 to 4 months 5 to 6 months more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  More than once a week  Twice a month  Once a month	
	Less than once a month  Other:	
Heating Source	Wood/coal Electric Propane/Gas Other:	
Heat Distribution	Forced air Radiant Other:	
How soon after the removal was a forced air heating source first used?	3 to 4 months 5 to 6 menths  more than 6 months	2/2/04
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	711 Michigan Farm to Market Rd.	To be completed by field personnel:  Do these properties currently have indoor or outdoor vermiculite?
Addresses or names of business where occupants work	- Self Employed	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
· · · · · · · · · · · · · · · · · · ·	· 	
ADDITIONAL INFORMATION		

Sheet No.: SA- 000133

#### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100306 Page No: 7-8 Sampling Date Owner/Tenant De Pur Sampling Date: 2/2/04 Skoaas, Arthur Business Name: N/A Land Use: (Residential) School Commercial Mining Roadway Other ( Sampling Team: MACTEC CDM Other\_\_\_\_\_ Parana Names: 2/2/04 Data Item Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00118 Location ID BD-000798 Sample Group Location Description Kitchen Category (circle) FS FB-(field blank) LB-(lot blank) FS FB-(field blank)-LB-(lot blank) FS FB/(field blank) LB-(lot blank) ugood Matrix Type (circle) Outdoor Indoor Outdoor Indoor Outdoor (25mm) 25mm Filter Diameter (circle) 37mm 25mm 37mm 37mm Pore Size (circle) PCM- 0.8 TÉM- .45 TEM- .45. TEM- .45 PCM-0.8 PCM- 0.8 Rotometer Rotometer DryCal Rotometer low Meter Type (circle) DryCal NA **DryCal** NΔ Pump ID Number 05913 92045-1 Flow Meter ID No. Start Date كحعم Start Time 9.03 Start Flow (L/min) 2/2/04 Stop Date 1948 Stop Time 9.03 Stop Flow (L/min) Pump fault? (circle) No Yes NA No Yes NA No Yes NA Ýes. NA -MET Station onsite? No ) NA Yes NA No Yes No Sample Type -Pre Post Clear Pre\_ Post Clear Pre Post Clear 2<sup>nd</sup> Clear 3<sup>nd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup>/Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA Overlanded from Field Comments sewt. Volunteer fixe Cassette Lot Number: 310201 Archive Blank (circle): Yes Archive Blank (circle): Archive Blank (circle): Yes No

		<del></del>
For Field Team Completion	G	00.50
(Provide Initials)	Completed by •	QC by •

Volpe:

Entered

Validated

Volce:

Entered

Validated

2C (Field Team)

Entered (LFO)

Volpe:

Entered

Validated

かりひょしょう

Sheet Na: D- 000134

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

d Logbook No: _/	0630	<b>6</b> Pa	age No:	7-8	s T	ampli <b>A</b>	ng Dat	te: <b>2</b> /	1a/o	. 4	· .
Tress: <u>214 W. I</u>		<u> </u>	<u> </u>							<del></del>	
Business Name:				<u> </u>	Skogo	15,_	<u> </u>		,		
Land Use: Residentia			Commercia		ing F			Other (			)
Sampling Team: MAC	TEC (CI	DM TOthe	er	_ Names:	PARI	4~/	<del></del>				<del></del>
Data Item	10 2/2	Cassett	e 1		Cassett	e 2			Cass	sette 3	
Index ID	CE	- 0011	9			7					7
Location ID	31	1.000	3798		· /						
Sample Group (circle) (Subgroup of the property)	Pump He	House, &	ned,	Pump Ho	/	hed,		Pump H	ouse	e, Shed,	
· · ·	Other_			Other				Other_		<del></del>	<del></del>
Location Description (circle)	Baseme Second !	nt, Ground	Floor	Basemer Second L	nt, Ground evel	t Floor,		Baseme Second		ound Flor	or,
(Detailed description point within the location)	1		· 	Other	$I^{\circ}$			Other			
Matrix Type (circle)		el Surfaces ffic Areas		1	Surfaces fic Areas		,	Horizont High Tra Other	iffic Afe	as ,	
itegary (circle)	FS)FB-	(field blank)	LB-(lot blank)	FS FB-(	field blank)	LB-(lot	blank)	FS FB-	(field bla	ink) LB-(	lot blank)
Sample Area (cm²) (circle)	100	200 3 460	00 NA	100	200 30	00	NA	100	200	300	NA
Filter Diameter (circle)	25mm	. 37mi	m	25mm	37m	m		25mm		37mm	
Pore Size (circle)	<del></del>	PCM		TEM45	PCM	- 0.8		TEM- ,45	<u>}</u> F	PCM- 0.8	<u> </u>
Flow Meter Type (circle)	<del></del>	<del></del>	Cal NA	Rotomete	<i></i>		NA	Rotomet	f D	ry-Cal	NA
Pump ID No.	<u>_</u>	66248		<del>                                     </del>		Z/ Z /	04	<del>`</del>		<del></del>	
Flow Meter ID No.		0-5/5	52/					<del></del>	<del></del>	<del></del>	<del></del>
Start Time	1239	1242	1245	1248	<u> </u>						
Start Flow (L/min)	2.0	2.0	2.0	2.0					<del></del> _	_:	
Stop Time	1241	1244	1247	1250		4.	In head				
Stop Flow (L/min)	2.0	1.0	2.0	2.0		1110	707				
Pump Fault? (circle)	No	Yes		No-	- ··· Yes	-/	الداد	oryo /	Y	es	
Field Comments	4	Ground Poor of	(I VINS)	100 cm <sup>2</sup>	Busco poft	nen	,t uce	100 qm²			_
Cassette Lot Number:	100 cm <sup>2</sup> .	Living Basem	.Room	100 cm <sup>2</sup> –		<b>-</b>		100 cm <sup>2</sup>			12/0
	f.	loor '		Assetting the	mla dalami - bi d	V		Augustinia St			1
Entered (LFO)		enk (circle): tered			nk (circle): Valid		No	Archive Bla Entered			
المستخدمات	eld Team C	moletica			<u> </u>						

For Field Team Completion
(Provide Initials)

Completed by • QC by •

214 W. Larch St. DePue 2/2/04 PCE-EPAl Volpe Author: Gregory Parana com. Activity: Stationery Air and Dust samples will be collected in BR-000798. Stationary air sample will not be collected in the basement due to guipment Imitations. 0705 LV pump 666248 calibrated with Dig-cal g COM office. Epuipment: Retps 4. Sumpling will be conducted in level D PPE IAW SAP Addendum, CSS, PCE Sampling 12/1/03. 0817 Onsite. CE-00118 pre-calibrated 0825 CE-00118 started (Kitchen). 1030 Onsite. Flow Che-OK, Fifer Ck-Ok. 1250 CE-00119 (dust) collected. CE-00118 flow CK-OK. Filter slightly discolored from wood burning stove. 1545 Onsite. Flow Ck-OK. Filter OK. 1803 Onsite. Flow ele. OK. Filter OK.

" 274 W. Larch St. - Deput 2/2/04 PCE - EPA/Voloc Gregory Tarana COMI 1940 Onsite. CE-00118 overloaded. Resident stated that the wood burner west/2/04 backing sent into house when wood was added C 1830., 1948 CE-00118 stopped, post calibrated and secled. 2012/2/2/04. Egupment deconned. 2015 ONSITE CDM office. Ret FSDS 5A-000183, N-000134 P.IF # BD-000798. Samples placed in sample storage. 2030 Out of logbook. -

2/2/04



"Rite in the Pain".
ALL-WEATHER

Environmental

FIELD BOOK No. 550

Libby Asbestos Project
Post. Cleanup Evaluation
Sampling
11/20103 - 1/30/04

All-WEATHER WRITING PAPER

# ALL-WENTHER ENVIRONMENTAL FIELD BOOK

Name	 	-	-		
	 			***	 
Address	 				 
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Phone	 			-	 -
Preject					
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This book is printed on "Rite in the Rain" All-Weather Writin ( Paper - A unique paper created to shod water and enhance the wollden image. It is wellely used throughout the world for recording critical field data in all kind of weather. For best results, use a pencifior on all-methor pen.

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29 12121	oursiana Auc	1.12-04
	ei Rd	1-13-04
33 2297	Kootenai River Rd.	H15-88+1/2
	Washington Acc	1/26-04
	N. Luich St.	1/27/04
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<sup>151</sup> FVC Pine car.: : tables

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<sup>153 -</sup> Sod Classiferneau

<sup>25</sup>d Conversions Agonath, Woodil, Volume, Joseph etc., p.

 <sup>456</sup> Convergents (Concenhations, Volume, Proc. of Time, Vet 1943, Acceleration).

<sup>356</sup> Massimum Concentration of Conferenceins to the Toxicis, Chapplopide

## 143 Crossway Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: /0030/ F	Page No.: Site Visit Da	le: /2/8/03
Address: 143 Crossway Ave	Structure De	scription: House
Occupant: Gordon Sulleva	<u>~</u>	Phone Number: 293-8496
Owner (if different than occupant):	MA	Phone Number: ~/ 4
Business Name: Focal Point		<del> </del>
Sampling Team: Papana (D	<u>M</u>	
Field Form Check Completed by (100% o	f forms):	
		·
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed a	using removal completion folders)	Date Removal Completed: <u>기03</u>
Location of vermiculite removed indoors	Attic Walls Interior or exteri	or) Walls Infront Room,
-	Crawl Space Basement Sub-flo	Downstairs office
	Other:	PADNSTALTS BY FICE
Location of vermiculite remaining indoors	Attic Walls (interior or extended	erios Above fice a lace
-		411 111
		laundry room
· · · · · · · · · · · · · · · · · · ·	None Other:	
Interior cleaning conducted during removal	Yes No	
{	If Yes, which floors:	·
-	Ground First Second	_
	Garage Other: Affic	~
18/20 00000	Yes No NA	<del></del>
Was carpet removed during removal activities?	110 114	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	-
	Other:	,
Legation of verminality remaining outdoors		M / / 5 / /
	·	Muterial Enclosed
	Stockpile Yard None	·   ·
t	Other: Under Deck	

	Value	Notes
Pre-Sampling Interview (To be comple	eted with resident)	·
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after removal was completed did used of EPA issued HEPA vac begin:	Rainbow Vue use weekly after removal 100 after removal conducts
	Immediately 1 to 2 months	removal conducte
-	3 to 4 months 5 to 6 months	-
	more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week	
	Twice a month  Once a month  Less than once a month	
	Other:	
Heating Source	Wood/Coal Electric Propane/Gas Other: Fac / Oi /	
leat Distribution	Forced air Radiant	FA- Fuel O.1 Rad - Propune
	Other:	Kad - Tropane
iow soon after the removal was a forced ir heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months	
•	more than 6 months	
ave any of the occupants been in contactiff any vermiculite since the removal was ompleted?	XI /	Explain: Wiring IN (rowls, - Installing door in di room - Dining room wall - Fire place
ddresses of other homes or properties here the occupants visit and may contain ermiculite	1322 Utah Ave.	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
<del>-</del> .		•
ddresses or names of business where cupants work	Noile out of hume and studio in back yard.	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
	Yaru.	

Sheet No.: PA-\_\_\_000023

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR Id Logbook No: 100301 Page No: 6/7/8 Sampling Date: 12/8/03 dress: 143 Cross way Avc. Owner/Tenant: Sullevan business Name: Face / Parat Land Use: Residential School Commercial Mining Roadway Other ( Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA Person Sampled: Gordon Sullivan SNN: 1735 Task: Post Clean Up Evaluation Data Item Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00004 Location ID RD-002969 Sample Group **Location Description** Shoulder (FS) FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) Category (circle) Matrix Type (circle) (ndoor Outdoor Indoor Outdoor Indoor Outdoor 25mm) iter Diameter (circle) 37mm 25mm 37mm 25mm 37mm bre Size (circle) PCM- 0.8) TEM- .45 TEM- .45 TEM-.45 PCM- 0.8 PCM- 0.8 Rotometer Flow Meter Type (circle) DryCal Rotometer DryCal DryCal NA Rotometer NA 626752 666023 Pump ID Number 92045-1 92045-1 Flow Meter ID No. 12/8/03 12/8/03 Start Date Start Time 1344 0824 3.08 3.08 Start Flow (L/min) 12/8/03 Stop Date : Stop Time 2.89 2.89 Stop Flow (L/min) (No) No Yes Yes NA Νo NA Pump fault? (circle) NA Yes NO. No , Yes NΑ NA MET Station onsite? Yes TWA TWA EXC TWA EXC NΑ Sample Type **EXC** 316 MIN X 2.99 4mm 340min x 2.991/min Field Comments V==19621 = 945 L assette Lot Number: 32415 Archive Blank (circle): Yes No. Archive Blank (circle): Yes No. Archive Blank (circle): Yes No -uC (Field Team) 🎉 Volce: Volpe: Volpe:

		<del></del> -
For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	400,

Entered

Validated

Entered

Validated

Entered (LFO) 29

Entered

Validated

Sheet No.: SA-\_ 0:20

### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

eld Logbook No: <u>J</u> dress: <u>///3</u> /		_ Page No:	-4, 13	vner/Ter	_ Sai nant: .	54//	Date: <u>/</u> V <b>a </b> ∼	<u> </u>	<u> </u>	
Business Name:										
Land Use: Resider		Comme	rcial	Mining	Ro	adway	Oth	er (		)
Sampling Team: MA	ACTEC CDM	Other	Nап	nes:	<u>PARA</u>	NA				
Data Item	10/0/01/03	cotto 1	1		atta 2		7-	Cass	sette 3	
		sette 1	<u> </u>	_ Cassette 2			<u> </u>	<u> </u>	sette 2	
Index ID —	/		ŀ					_		
	CE- 00	005 _					↓			
Location ID	BD-00	2969	ľ			<u>.</u> .				
Sample Group	House									
Location Description		2			·	•				
-	DINING	Room						•		
•										
Category (circle)	FS) FB-(field bla	ook'   R (let blank		- 3-(field blar	J-1 1 D /I	ot block)	E .	2.(fald bis	ınk) LB-(I	at black
Matrix Type (circle)		door NA	Indoor	Outd		NA	Indoor		door ·	
Filter Diameter (circle)	<del></del>	37mm	25mm		7mm		25mm		37mm	
Pore Size (circle)							·	<del></del>	PCM- 0.8	
·		PCM- 0.8	TEM-		CM- 0.8		TEM-		·· <b>-</b>	
Flow Meter Type (circle)	Rotometer 1	DryCal NA	Rotome	eter D	ryCal	NA	Rotom	eter (	DryCal	NA
Pump ID Number	2/35	<u> </u>					<u> </u>			
Flow Meter ID No.	92045	5.1								
Start Date	12/8/	03								
Start Time	0834	7				_				
Start Flow (L/min)	4.05	<del></del>				·				· <del></del>
Stop Date	12/8	/03								
Stop Time	1936	<del>/                                      </del>						$\top$		
Stop Flow (L/min)	3.86	<del></del>	<del> </del>			1	<del></del>	<del>                                     </del>	. ]	
Pump fault? (circle)	No. Yes	NA	No	Yes	NA.		No	Yes	NA	,
MET Station onsite?	No Yes	NA NA	No	Yes	NA		No	Yes	NA	
Sample Type	Pre Post	Clear	Pre	Post	Clea		Pre	Post	Clea	 1
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Cle	ar (NA)	2 <sup>nd</sup> Clea	r 3 <sup>rd</sup> Clea	er NA		2 <sup>nd</sup> Clea	ır 3 <sup>rd</sup> Cle	ar NA	
ield Comments	662 minx		(E-0	opos	540	2012	····			• • •
	= 2627-	.0	12/8	a = rap	10,72	77,				
assette Lot Number:	- 202	X.	10/0					• .		
<u> 32415 </u>	Archive Blank (circle	e): Yes No	Archive B	lank (circle	): Yes	No	Archive B	llank (circle	e):_Yes	No
C (Field Team)	Volpe:		Volpe:				Volpe:			
intered (LFO) <u>か</u>	Entered V	alidated	Entered	Va	lidated		Entered	∨	alidated	

Completed by

QC by

(Provide Initials)

Sheet No.: SA- 000122

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

	10030/ Page No: _		Date: /2/8/83
Rusiness Name:	rossway Ave. For/b/2/2/33 Facal Bi	Owner/Tenant: Su//	IVUN
Land Use: Residen			Other ( )
	CTEC CDM Other	<del>-</del> -	
Data Item	1 /2/10/03 Cassette 1	Cassette 2	Cassette 3
Index ID			
	CE- 00006 _		
Location ID	BD-002969	:	
Sample Group	House		
Location Description	Muster Bedroom. Doorway		•
	<u> </u>		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	(ndoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm -	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8)	TEM45 PCM- 0.8	TEM45 PCM- 0.8
rlow Meter Type (circle)	Rotometer DryCat NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	b12/2/09 2/41		
Flow Meter ID No.	92045-1		
Start Date	12/8/03	-	
Start Time	0340		
Start Flow (L/min)	4.05		
Stop Date	12/8/03		
Stop Time	19.31		
Stop Flow (⊔min)	4.05		
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre Post Clear
<del></del>	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2nd Clear 3nd Clear NA CE-00006 Sama	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	651min x 4.052/min	period = 12/10,12	19,12/8
Cassette Lot Number:	2637L	٠,	
QC (Field Team) かん	Volpe: Yes No	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

	<del></del>		
For Field Team Completion	Completed by	00 5	
(Provide Initials)	Completed by	: CC by	

000026

LIBBY FIELD SAMPLE DATA	SHEET	(FSDS) F	FOR PERSON	<b>NAL AIR</b>
		• •		

Field Logbook No: _/	<u> </u>	Owner/Tenant: Sampling D	rate: <u>/2/9/03</u>
business Name:			
Land Use: Residen		ial Mining Roadway	Other (
Sampling Team: MA	CHEC CDMD Other	Names: PARAMA	,
Person Sampled:	SNN:	1735 Task: Post Clea	NUP Evaluation
	1 h 10/07	<del></del>	1
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00007		
Location ID	BD-002969		
Sample Group	House		
Location Description	Shoulder		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS F8-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor	Indoor Outdoor	Indoor Outdoor
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
ore Size (circle)	TEM45 (CM- 0.8)	TEM- ,45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	626752	626614	
Flow Meter ID No.	92045-1	92045-1	
Start Date	12/9/03	12/9/03	
Start Time	0837	1454	
Start Flow (L/min)	3.08	3.08	
Stop Date	12/9/03	12/9/03	<u>-</u>
Stop Time	1451	1750	
Stop Flow (L/min)	3.08	2.89	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type -	TWA EXC NA	TWA EXC (NA)	TWA EXC NA MIZITA
ield Comments	374min x3.08/min	176 min x 2.99 1/min	CE-0000 ( Fares Col
assette Lot Number:	a //52 L  Archive Blank (circle): Yes No	= 5261 4-/67 Archive Blank (circle): Yes No	PL (1/10, 12/9  Archive Blank (circle): Yes No
C (Field Team)	Volpe:	·	Volpe:
ntered (LFO)	Entered Validated	·	Entered Validated

For Field Team Completion Completed by QC by

Sheet No.: SA-\_\_\_000127

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: 100301 Page No: 9-12 Sampling Date: 12/8/03/2/9/a

Idress: 143 Crossway Ave Owner/Tenant: Sullivan Pischol Susiness Name: Focal Paint

Land Use: Residential School Commercial Mining Roadway Other ( )

Land Use: Residential School Commercial Mining Roadway
Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARAN A

Data Item	- Cassette 1	Cassette 2	Cassette 3		
Index ID	CE-00006 1	cont.)			
Location ID	BD-002969	-			
Sample Group					
Location Description	House and level Waster Bedroom Doorway		_		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS_FB-(field blank)_LB-(lot blank)		
Matrix Type (circle)	Indoor Outdoor NA -	Indoor Outdoor NA	Indoor Outdoor NA		
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm -		
Pore Size (circle)	TEM45 PCM- 0.8)	TEM45 PCM- 0.8	TEM- 45 PCM- 0.8		
ow Meter Type (circle)	Kotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA		
Pump ID Number	2/35				
Flow Meter ID No.	92045-1				
Start Date	12/9/03	·	*		
Start Time	0849				
Start Flow (L/min)	4.05				
Stop Date	12/9/03				
Stop Time	1801				
Stop Flow (L/min)	4.05				
Pump fault? (cirde)	No Yes NA	No Yes NA	No Yes NA		
MET Station onsite?	(No Yes NA	No Yes NA	No Yes NA		
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA		
Field Comments  Cassette Lot Number:	552 x 4.05 2/min = 2236 L Archive Blank (circle): Yes No	(E-00006 54mp/6 p(100 = 12/10, 12/9, Archive Blank (circle): Yes No			
QC (Field Team) DR	Volpe:	Volpe:	Volpe:		
Entered (LFO) P5	Entered Validated	Entered Validated	Entered Validated		

		<del></del>
For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by '	QC oy

Sheet No.: D-  $\underline{-00006}9$ 

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Business Name: Fo Land Use: Residenti Sampling Team: MAC	TEC C	hool DM C	Co Other	ommercia	ıl Mir _ Names			dway <b>A</b>	Othe	r(	·	)
Data Item	19/	2/10/5 Cass	<del>5</del> sette	1		Cas	sette 2	?		Ca	ssette	3
Index ID	CI	E- OC	0009	)							-7	
Location ID	BA	-00	290	69								
Sample Group (circle) (Subgroup of the property)	Garage Pump H Other	ouse	Shed	j,	Garage Pump H Other_	louse	e, Shed,		1	House	se, Shed	,
Location Description (circle) (Detailed description point within the location)	Baseme Second Other	Level			Baseme Second Other_		round Flo	oor,		id Lev <b>l</b> ei	Ground Fl	oor,
Matrix Type (circle)	Horizontal Surfaces High Traffic Areas Other			Horizontal Surfaces High Traffic Areas Other		Horizontal Surfaces High Traffic Areas Other						
tegory (circle)	FS FB-	(field bla	nk) LB	-(lot blank)	FS FB-	(field bl	enk) <sub>,</sub> LB-(	lot blank)	FS F	B-(field t	olank) LB-	(lot blan
Sample Area (cm²) (circle)	100	200	300	(400)	100	200	300	NA.	100	200	300	NA ·
Filter Diameter (circle)	25mm	3	37mm		25mm		37mm		25mm	1	37 <i>m</i> m	
Pore Size (circle)	TEM- 4	F	PCM- 0	.8	TEM45	5	PCM- 0.8	3	TEM	<b>4</b> 5	PCM- 0.	8
Flow Meter Type (circle)	Rotomet	er 16	ory-Cal	\ NA	Rotomet	er	Dry-Cal	NA	Rotom	eter	Dry-Cal	NA
Pump ID No.	12/3/3	30.5	725	161205	*			· · · · · -	1	<del>                                     </del>		
low Meter ID No.	•	0.5										
Start_Time	1547	155		559	1602							
Start Flow (L/min)	2.0	2.0		2.0	2.0	1						
top Time	1549	153	_	601	1604							
top Flow (L/min)	2.0	2.0		2.0	2.0	<del>                                     </del>						
<del></del>		Ye	<del> </del>		No		es es		No	<u>'-                                    </u>	Yes	
ump Fault? (circle)	No )			4. 4.		·	es <del>4</del>	1 417		<del></del>	165	
ield Comments	190 cm²	Grou Fron Fire p	+ Ru	**************************************	100 cm²	T.00	of wa	10 Hickory 11 mos	₹ 100 cm		1	6
Cassette Lot Number:	100 cm²⊷	fallu Zad	iny t	floor L	100 cm <sup>2</sup>	724	TE1	-	100 cm	2	/1	2/10
		ite.li e	JAY .	floor							,	
	Archive Sta				Archive Bla			No			cle): Yes	
ntered (LFO) 24	Volpe: En	tered	Val	idated	Entered_	<sup>\</sup>	√alidated		Entered		Validated	<sup>1</sup>

For Field Team Completion
(Provide Initials)

Completed by

QC by

### Residential Activity Log

Resident Address: 143 Crossway Ave.	·-···
Volunteer Name: Gordon Sullivan	· .
Sampling Date(s): _/2/8/63	· · · · · · · · · · · · · · · · · · ·
Personal air sample number (s): <u>CE-00064</u>	· · · · · · · · · · · · · · · · · · ·
FSDS number(s): PA - 000023 SA - 00012/ SA	.000122

Date/Time Interval	Go Outside?	Pump problem?	General Activities
3:30 Am 12:30 - Pm	Yes ( mins) Describe	(No) Yes (describe)	work in office
12:30 Pm	Yes ( mins) Describe	Yes (describe)	work in office uppor level
3.30 PM	No Yes ( mins) Describe	No' Yes (describe)	Rock work - Goed
3:30 CM 4:30	(No*) Yes ( mins) Describe	No Yes (describe)	General- wort
4:30 7:30	Yes ( mins) Describe	No Yes (describe)	General - Dimor work in office Sil Around
	No Yes ( mins) Describe	No Yes (describe)	

Note: Continue on second page if necessary.

Greg Parana 243-1759

#### Residential Activity Log

Resident Address: 143 Crossway Hve
Volunteer Name: Cordon Sullivan
Sampling Date(s): <u>12/9/63</u>
Personal air sample number (s): CE-0007
FSDS number(s): 5A - 000/26 5A-000/27 . PA - 0000 26

Date/Time Interval	Go Outside?	Pump problem?	General Activities
8:39	No ' Yes ( mins) Describe	No Yes (describe)	Work in office
12:30 -	Yes ( mins) Describe	পার্ক – Yes (describe)	Rock work.
<b>0</b> 2:30 4:30	Yes ( mins) Describe	Yes (describe)	Work in office Upper level
4:30	No Yes ( mins) Describe	Ves (describe)	Work in back hollway - moving thing mound
21,00	No Yes ( mins) Describe	No Yes (describe)	thing mound
	No Yes ( mins) Describe	No Yes (describe)	

Note: Continue on second page if necessary. --

### Residential Activity Log

Resident Address: 143 Crossway Ave.	
Volunteer Name: Gordon Sullivan	
Sampling Date(s):	
Personal air sample number (s):CE-00007	
FSDS number(s): PA-000027 - SA-000(28,141	

		<del> </del>	<del></del>
Date/Time	Go Outside?	Pump problem?	General Activities
Interval			<u> </u>
8:30	<b>1</b>	(Ma)	work arand
8.50	Yes ( mins)	Yes (describe)	
	Describe		Proplace
9.30		-	'
	1	1	
		<u> </u>	
27. L	No	No	
Out	Yes ( mins)	Yes (describe)	
}	Describe	i	1
	<del> </del>	<del></del>	
12:00	No -:	No	work 1 - office
}	Yes (mins)	Yes (describe)	11000 10 4
1 0. 02	Describe		upper leve,
2:00			
-	Ì		1
<del></del>		45	<del>                          -     -     -   -   -     -  </del>
2:00	Yes ( mins)	Yes (describe)	Construction
	Describe	, (35 (3636),56)	WOULERAIS -
2-20			l <u>-</u> . <del>-</del> .
3,30	_	<u> </u>	Fireplaco -
	_		- <b>'</b>
٠ د سر س	'No')	No )	12 mch
3:30	res ( mins)	Yes (describe)	work in office
-	Describe	' ',	
6.23		<b> </b> `	, i
6:30	l	}	]
			<u>.                                    </u>
<u> </u>	(Ng	No	7
[	Yes ( mins)	Yes (describe)	-Ret to cal
1.00	Describe		
6.0	_		$\begin{bmatrix} z & n & 1 \end{bmatrix}$
7:00	-	}	+ Drink wind
1.00			

Note: Continue on second page if necessary.

Sheet No.: SA- 000128

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No:		/3-/7 Sampling Owner/Tenant:	Date: <u>/2//6/63</u>
Business Name:	rossway Ave.	Owner/renam	
Land Use: Resider			Other ( )
		<del>                                     </del>	10/10/03
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	€E-00005 (C	ont.) -	CE- 00008
Location ID	BA-002969	·	BD-002969 -
Sample Group	House		Blank
Location Description	DINING ROOM	_	NIA
Category (circle)	FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS B-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	75mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PEM- U.B	TEŅ45 PCM- 0.6	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotomete DryCal NA	Rotometer DryCal NA	Rotometer DryCal (NA)
Pump ID Number	2135		N/A -
Flow Meter ID No.	92045-1		
Start Date	12/10/03		
Start Time -	0350 4110.		
Start Flow (L/min)	4.05 4.05 19.00	2/10/03	
Stop Date	12/10/03		7
Stop Time	/838 _		
Stop Flow (L/min)	1,05 4.05 1012/143		12/10/03
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes (NA)
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear . 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>nd</sup> Clear (NA
Field Comments  Cassette Lot Number:	588 min × 4.05 2/mi, = 2381 L	(E-00905 sumple period=12/10,12/9, 12/8	
QC (Field Team) 1 K	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes (No ) Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
/			

For Field Team Completion	Completed by	00.5	
(Provide Initials)	Completed by	QC by	

Location Sul/1 van Date 12/8/63 Project / Client Post Cleunup Evaluation EPANofee Author: Gregory Parana CDM And 0840 CE-00006 started (2nd level) 0855 Offsite. 1110 Onsite. 1115 CE-00005 calck. OK. 1118 CE-0000 6 calck. OK. 1120 CE-00004 Calck-OK. 1125 Offsife 1310 Weather 300F Imph wind E-W 1340 CE-00004 stopped and post calibrated. CE- 80004 affached to pump and pre-estilizated sample. Sample placed on volenter 1344 CE-00004 started. Morning shift-Gordon worked in his office on the 2nd level. CE-00005,06 were calibrated and no change was noted withe flower tes. CE-00005 in diving room adjecent to the fireplace and certing, tan which is on. Kathy Sullivan was painting in the freplace coom. Offsite

143 Crossway Ave

Proposition Post Clean Up Evalution EPA- Volpe Author: Gregory rarana by

1715 Onsite, Gordon indicated that he condrock work on fireplace. Filter ((E-00004) discolored. Visible particulate noted on filter. Flow rate checked with No change. CE. 00006 filter

checked -OK. Flowrate checked OK. 1726 CE-00005 filter Noted visible particulate on filter, No. discoloring. Flowrute checked-OK.

1736 Offsite.

1920 Onsite. 1924 CE-00004 stopped, capped, and post calibrated.

CE-00004 scaled. with Co C/6 12/8/03 1931 CE-0000 6 stopped, capped and

post calibrated. Filter looked OK.

1936 CE-00005 stopped couped and post calibrated. Filterslighty loaded.

Equipment decontaminated. 1950 Offsite to CDM office. Ref FSDS

PA-0,00023, SA-000121, 22.

2015 Placed sumples in sample storage room and locked Onfor loghook? Location 143 Crossway Ave. Date 12/9/03 Project / Client Post Clean Up Evaluation - EPA- Yolpe Anthor: Gregory Parana COM Sont

Activity: Day 2 of personalais sumpling on Gordon Sullivan and ambient air sampling inside of BD-002969. ANEW cassette was placed on Gordon due to the loading on sample ( E-00004. This is a deviation to the SAP. Sampling will be conducted in accordance with SAP Add. , Post Clean Up evaluation Sampling, CSS 11/13/03. Ket ps 6 of this losbook for equipment 0820 Onsite. Gordon present. Pump 626752 pre-calibrated with sample CE 00007 undirotometer 82045-1. Sumple placed on 65. 0837 CE-00007 started. High Volpump 2141 and 2135 plussed in a started to warm up. Rimp 2141 pre-calibrated with sample CE-00005 in line. D 0845 CE-00005 started. 12/1/05

Sullivan Location 143 Crossway Ave. Date 12/4/03 Project / Client Post Clean Up Evaluation-EPA-Volac Author: Gregory Peruna CDM Ann Pump 2135 pre-culbrated with CE-00006 where 0849 CE-00006 started. - 6 0855 Pre-Sumpling Interview Form (PIF) completed with Gordon and Kathy Sullivar. Residential Activity los 0915 Offs. fe. 0845 Weather: 240 F Wind 2 mph E-W 1115 Onsite. 120 (E-00005 flow ck-OK Cat ck-OK. 1125 (E-00006 flow, ck. OK Cat & St. 1128 CE-00007 Catek 19103 /low ck .- OK GS was observed working in 2nd level office. - P 1451 CE-00007 stopped, capped and post calibrated. Sample attached 1454 CE-00007 started. 12/1/13

Sullivan

Location 143 Crossway Ave Date 12/9/03 11

Project / Client Post Clean Up Evaluation - EPA-Volpe
Anthor: Gresory Parana CDM Amel

1458 CE-00,000 Flower - OK Filter slightly discolored. 1503 CE-00005 Flowck-OK. Filter discolored with visible particulate 1515 Offsite. 1745 ONSITE: 1750 CE-00007 stopped and postcalibrated. Cassette capped and bassed Visible particulate Noted, loading not as heavy as (E-00004. CE-00007 WILL be used on /2/10/03. 1755 CE-00005 stopped, post calibrated and capped. 1801 CE-0000 6-5 toppedy capsed, ... post calibrated and bassed. Equipment deconteminated. Recieved completed residential activity log from GS. Ret FSDS 5A-000127, 126, PA-000026. 1810 Offsite. To comoffice. Samples locked in sample sturasc. 4 12/9/03 Sallevan

Sallevan

Project Client Post Acmoral Evaluation - EM-Volpe
Anthor: Gregory Parana Irol - COM

1900 Out of los book

Looo COM office - Peperwork.

Calling scheduled volunteers

to set up a time so I can
take the EPA furnished HEPA

Vacs. Contacted all residents.

HEPA vacs scheduled to be

Lelivered tomorrow Illiolos.

2050 Out of los book.

Sullivan
Location 143 Crossway Ave. Dale 12/10/03

Project/Client Post Removal Evaluation Frank
Anthor: Gregory Parana Arizon Francis

Activity: Day 3 of Post Cleanup evaluation sampling @ DD-002969 Personal air, stationary air, and dust samples will be collect inaccordance with the SAP Addendum PCE Sampling CSS 12/1/03 Equipment reterence B-1610, 5-15-21 used to calibrate low volume sampling pump for dust sampling Sullivan present tow volpums 666023 calibrated with samp 1c. inline CE +00007 - Rotometer 92045-1. 0841 CE-00007 started. Sample placed on Gordon. Sample CE-00005 placed on pump 2135 und pre-calibrated 0850 CE-00005 started -Sumple CE-00006 placed on pump 2141 and pre-calibrated. 0855 CE-00006 started. Activity 109 910 (n to GS. - 10/10/03

Location 143 Crossway Avc. Date 12/10/63 Project / Client Post Removal Evaluation-EPAlVolpe Author: Gregory Perrans COM And 1130 Onsite. Gordon indicated that from 0940 untill 1110, Pump counter used to verypialistos ventued verify time sumple was oft. 1135CE-00007 calibrated ck-OK. Filter discolored and x 40% loaded. 1140 CE-00005 calibrated ck-OK Filter Ck-OK. CE-00006 culck-OK Filter Ck OK. 65 completing rock work onfrepla 1150 Offsite, CDM Office. , 1300 Low vol pump 2/2/20/03 6/2058 calibrated with dry-cal, 0.45 um TEM dust sample cassette lot #23802. Late Entry 1030 HEPA vac SIN 0328001333 to Anne Pescatore 607 W. 10th St. 1100 HEPA vac 5/N:0328001330 to Jim Allen 1109 Louisiana Ave. 1400 Completing paper work @ (DM)

Anthor: Gregory Parana COM Arth 1525 Owsite GS work in front 1 room on fireplace rock work. 1530 CE-00007 stopped. Post calibrate. CE-00007 placed on pump 626614 and calibrated 1535 CE-00007 started. 1542 CE-00005 flow CR OK. 1544 CE-00006 Flow Ck - OK. 1601 Dust sample CE-00009 collected, capped and scaled. Ref FSDS D-000069. 1612 Offsite to 1116 Utch Ave to deliver OFFPA vac. 1630 HEPA Vac S/N 6328001331 relinguished to Mury England. Origination conducted 1700 Offsite. 1830 Onsite 143 Crossway Ave. 1836 CE-00007 stopped post calibrated and scaled: 1838 CE-00005 stopped, post 1841 (6-00006 stopped, post

calibrated and scaled 12/10/83

Location 143 Cross way Avc. Date 12/10/03

Project/Client Post Removal Evaluation- FPA/Volpe be

Sulliven Sullivan Location 143 Crossway Auc. Date 12/11/03 Tradition 143 Crossway Ave. Date 12/10/03. Project / Client Post Removal Evaluation sumpling Volge Project / Client Post Evaluation sampling EPA-Volpe Anthor: Gregory Parana com Arm Author: Gregory Parana COM Equipment decontaminated Resident 1100 Field GC of FSDS conducted Activity log recieved from 65. by Damon Repine. 1855 Offsite to CDM office. Samples 1151 Relinguished sumples to Terry Crowell, Chan. locked in sample storage @ 318 Louisian Ave. Out of aliolos 1200 Out of losbooks -Ref FSDS PA-000027-54-000128, 141. Out of logbook.

# 620 Utah Ave

BD# \$502177

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: / 5030/	Page No.: <u><b>27</b> </u>	18/04
Address: 620 Utha Ave.	Structure Description	House
Occupant: Roland Chilo	,	Number: 293-4026
Owner (if different than occupant):	~/A Phone	Number:
Business Name: N/A		
Sampling Team: PARANA - C	SM +	· · · · · · · · · · · · · · · · · · ·
Field Form Check Completed by (100% of	of forms):	<del></del>
<u></u>		
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Dat	e Removal Completed: <u>63/63</u>
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space: Basement Sub-floor	·
<del>-</del>	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	Areas scaled off
	Crawl Space Basement Sub-floor	in attic-under floor Boards
	None Other:	floor Boards
Interior cleaning conducted during removal (	Yes No	
	If Yes, which floors:	_
	Basement Ground Second	
·	Garage Attic Other:	
Was carpet removed during removal _ activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway -Flowerbed Garden	
	Stockpile Yard None	-
	Other:	·-
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
Location of vermicume remaining outdoors		
<b>-</b> .	Stockpile Yard None	
	Other:	— <b>.</b> .

Data Item	Value	- Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	3/2003 Remova completed 12/2003 Recieve HEPA Vac
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month  Cess than once a month  Other:	
leating Source	Wood/Coal Electric Propane/Gas Other: Fuc Oil	
leat Distribution 	Forced air Radiant Other:	
low soon after the removal was a forced in heating source first used?	1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
ave any of the occupants been in contact ith any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties here the occupants visit and may contain ermiculite	None	To be completed by field personnel Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where cupants work	VFW- Libby Christian Church Shop-Behind Church -Volunteer Work	To be completed by field personnel Do these properties currently have indoor or outdoor vermiculite?

Sheet No.: SA- 000135

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Sampling Date: dress: 620 Utah Ave Owner/Tenant: Roland dsiness Name: N/A Commercial School Other ( Land Use: Residential Mining Roadway ) Names: PARANA Sampling Team: MACTEC (CDM) Other \$ 1/8/04 Cassette 1 16104 de Data Item Cassette 2 Cassette 3 Index ID CE- 00025 CE- 00024 Location ID BD-002177 BD-002177 House Sample Group West Bedroom LIVING ROOM Location Description Category (circle) FS FB-(field blank) LB-(lot blank) FS ) FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) NΑ Outdoor Matrix Type (circle) Indoor) Outdoor Indoor Outdoor NA Indoor NA Filter Diameter (circle) 25mm 37mm 25mm 37mm 25mm 37mm Pore Size (circle) PCM- 0.8 PCM-0.8) PCM- 0.8 TEM-.45 TEM- .45 TEM- .45 Rotometer Rotometer 7 w Meter Type (circle) DryCal DryCal Rotometer DryCal NA 0689 0387 Pump ID Number -92045-1 Flow Meter ID No. 92045-1 1/8/04 1/8/04 Start Date 0832 0834 Start Time 9.01 Start Flow (L/min) 18/04 Stop Date 1948 Stop Time 1945 9.01 9.01 Stop Flow (L/min) No NA Yes Yes NA Pump fault? (circle) Yes NA No No. No. MET Station onsite? Yes NA Yes NA No Yes. NA Post -Sample Type Pre Post Clear Pre Post Clear Pre Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Ølear 3<sup>rd</sup> Cl<u>ea</u>r 1/2/1/8/04 Field Comments Cassette Lot Number: 32415 Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes Volpe: C (Field Team) . Volpe: Volce: Validated Entered (LFO) Entered Validated Entered Validated Entered For Field Team Completion OC by 7 Completed by

(Provide Initials)

Sheet No.: D-  $\underline{\phantom{000070}}$ 

#### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

	, , , ILLED O	AIRL CE DATA	A SHEET	(1000)1	)	
Field Logbook No: 10	0301	Page No:	-28	Sampling Da	ate:/_8/	4
ress: 3790	HWY	271/8/04	Owner/Tena	ant: Rolan	ed Child	<u>~</u>
ausiness Name: 62						
Land Use: Residentia		Commercial	Mining	Roadway	Other (	)
Sampling Team: MACT	EC CDM O	therN	lames: <u>PA</u>	RANA		···-
Data Item	Cass	ette 1	Cass	sette 2	Cass	ette 3

Data Item	Ca	ssette	⊋1		Casset	te 2		Cassette	e 3
Index ID	CE- 0	002	8						7
Location ID	BD-0	02	177						7
Sample Group (circle) (Subgroup of the property)	Garage, House Pump House Other	se, Sh	ed.	Garage, Pump H Other_		Shed,	Garage Pump F Other_	1 1	æd,
Location Description (circle) (Detailed description point within the location)	Basement, Second Level		Floor	Second	nt, Groun _evel		Basemond Second Other_	:	Floor,
Matrix Type (circle)	Horizontal Su High Traffic A Other	_		1	al Surface: ffic Areas	s	l l	tal Surfaces affic Areas	
tegory (circle)	FS FB-(field I	plank) L	B-(lot blank)	FS FB-	field blank)	LB-(lot blar	k) FS FB	-(fiel¢ blank) L	_B-(lot blani
Sample Area (cm²) (circle)	100 200	(4)	DO MA	100	200	300 N	100	200 300	) NA
Filter Diameter (circle)	(25mm)	37 <i>m</i> m		25mm	37n	nm _ ·	25mm	37тл	n ,
Pore Size (circle)	(TEM45)	РСМ-	0.8	TEM45	PCI	M- 0.8	TEM4	5 PCM-	· 0.8
Flow Meter Type (circle)	Rotometer	Ory-C	a) NA	Rotomete	er Dry	-Cal NA	Rotome	ter Dry-Ca	al NA
Pump ID No.	66	602	3						
low Meter ID No.	B1610							i	
Start Time	1539 15	743	1549	1552	Í -				
Itart Flow (L/min)	2.0 2.	0	2.0	2.0					
itop Time	1541 154	5	1551	1554	-				
top Flow (L/min)	2.0 2	.0_	20	2.0	_				1
ump Fault? (circle)	No	Yes		No	Yes	-	- No	Yes	
rield Comments	100 cm2 - Gr Hullway 100 cm2 - Gr	/	d floor	100 cm <sup>2</sup>	_	level- om	100 cm <sup>2</sup>	-/F	1/8/0
23802	100 cm - 2nd level  Inhallway			100 cm <sup>2</sup>		100 cm <sup>2</sup>			
ntered (LFO)	Archive Blank (ci Volpe: Entered		es No /alidated	Entered	nk (circle); Valid	<u>Y</u> es No dated		Valida	

For Field Team Completion	Completed by	60	ac by TC	
(Provide Initials)	Completed by		GC by	

Roland Childs Location 620 Utah Ave Dale 1/8/04 Project / Client PCE - EPA / Volpe Author: Gregory taruna (DM) Activity Stationary Arrsumplin will be completed on the ground floor and 2nd level. Ore dust sample will be collected All sampling will be conducted INSIDE of BIS-002177 IAW SAP Addendum, CSS, PCE Sumpling 12/1/03. Exuroment: Ret ps 6 of this los book. Retometer 92045-1 used to calibrated air samples. 0800 low vol. sampling pump 666023 calibrates 4. fh Dy Cal B 1610 51521. 0815 Onsite. Sample locations selected and sumps furned on CE-00024 pre-calibrated. 0832 CE-00024 started. CE-00025 pre-calibrated 0834 CE -00025 started. offsite to 3796 Hay 25. 1135 Onsite. DIF completed with residents. LE-00024. 25 Flow Ck

Roland Childs Location 620 Ufch Ave. Date 1/8/04 Project / Chent PCE. EPA / Volpe Author: Lord Gregory Parane 1143 CE-00024 stopped. Re-calibrated 1144 CE-00024 started CE-00025 flow check. No change. Offsite. 1530 Orsite. Flowek - OK. Filter Ck. OK. 1554 CE-00028 (Dust) collected Offsite. -1940 ONsete. 1945 CE-00024 stopped post culibrated and scaled. 1948 (15-00025 stopped, postculibral and scaled. Emponent decontamatedat site. Offsite to 3796 Hay 2 S. 2030 Onsite CDM Office. Samples locked IN sample storase Ref FSDS SA-000185 D-000070.

# 1212 Louisiana Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 16636	Page No.: 21-30 Site Visit Date:	1/12/04
Address: 12/2 Louisiana	Ave Structure Description	on House
Occupant: Joe Duffield	•	e Number: 404-243-6685
Owner (if different than occupant):		e Number:
Business Name: N/A		
Sampling Team: PARAWA - CIDA	1	
Field Form Check Completed by (100%)		
	/ /	
<sup>-</sup> Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders)	ate Removal Completed: 05/03
Location of vermiculite removed indoors	Attic Walts (interior or exterior)	
·	Crawl Space Basement Sub-floor	
_	,	1
	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	-
	Crawl Space Basement Sub-floor	·
	None Other:	_
Interior cleaning conducted during removal	(res) No	
1	If Yes, which floors:	
1		
	Basement Ground Second	
	Garage Attic Other:	-
Was carpet removed during removal activities?	Yes No NA	
Location of xermiculite removed outdoors	-Driveway Flowerbed Garden	Along house and
	Stockpile (Yard) None	Along house and along fence
		-
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
	Stockpile (Yard None	
	Other:	

Data Item .	Value	- Notes
Pre-Sampling Interview (To be completed	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
	Immediately 1 to 2 months	,
	3 to 4 months 5 to 6 months	
	more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week	
provided that A vectority.	Twice a month Once a month	,
•	Less than once a month	
-	Other:	<u></u>
Heating Source	Wood/Coal Electric Propane/Gas	
	Other:	
Heat Distribution	Forced air Radiant	Wull board
	Other:	
How soon after the removal was a forced air heating source first used?	3 to 4 months 5 to 4 months	
	more than 6 months	
lave any of the occupants been in contact with any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
addresses of other homes or properties where the occupants visit and may contain ermiculite	None	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where ccupants work	Retired -	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
	— <u>.</u> .	. <del>-</del>
DOITIONAL INFORMATION		
	· · · · · · · · · · · · · · · · · · ·	<del></del>

Sheet No.: SA-\_\_\_000208

	FIELD SAMPLE DATA		
Field Logbook No: _	/0030/ Page No:	27-50 Sampling	Date: ///2/04
Business Name:	Louisiana Ave	Owner/Tenant: Dut)	illa
Land Use: Reside	ptier School Commerc	cial Mining Roadway	Other (
Sampling Team: M/			Other ( )
A CONTRACTOR OF THE CONTRACTOR	1/p 1/12/04	1 /21/12/04	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00032	CE- 00033	
Location ID	BD-000315	BD-000315	
Sample Group	House	House	
Location Description	Kitchen	2nd level Hallway	
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS EB-(field blank) LB-(lot blank)
Matrix Type (circle)	ndoo Outdoor NA .	ndoo Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	<b>25mm</b> 37mm	25mm 37mm	25mm /37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
ow Meter Type (circle)	Rotomete DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0891	0387	
Flow Meter ID No.	92045-1	92045-1	
Start Date	1/12/04	1/12/04	
Start Time	09:16	0349	
Start Flow (L/min)	9:01	9.01	_
Stop Date	1/12/04	1/12/04	
Stop Time	2005	2008	
Stop Flow (L/min)	9.40	9.01	
Pump fault? (circle)	Yes NA	No Yes NA .	No. Yes NA
MET Station onsite?	No Yes NA .	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA	Pre Post Clear -	Pre Post Clear 2 <sup>nd</sup> /Clear 3 <sup>nd</sup> Clear NA
Field Comments			114/04
Cassette Lot Number:	Archive Blank (circle): Yes _No :	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion Completed by\_ QC by (Provide Initials)

Sheet No.: D-\_\_000099

eld Logbook No: 100301 Page No: 29-30 Sampling Date: 1/12/04 dress: 1212 Louisians Ave. Owner/Tenant: Defficia Business Name:\_\_\_\_ NIA Commercial Land Use: Residential School Mining Roadway Other ( Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA 1117104 Data Item Cassette 1 Cassette 2 Cassette 3 CE- 00035 Index ID Location ID BD-000315 Garage, House Shed, Garage, House, Shed, Garage, House, Shed, Sample Group (circle) Pump House Pump House Pump House (Subgroup of the property) Other Other\_ Other\_ Location Description Basement Ground Flod. Basement, Ground Floor, Basement, Ground Floor, Second Level Second Level Second Level (circle) Other Other (Detailed description point within the location) Horizontal Surfaces Horizontal Surfaces Honzontal Surfaces Matrix Type (circle) High Traffic Areas High Traffic Areas High Traffic Areas Other Other FS )FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field biank) LB-(lot blank) tegory (circle) Sample Area (cm<sup>2</sup>) 100 100 200 300 100 200 300 NA 200 NA (circle) Filter Diameter (circle) 25mm 37mm 37mm 25mm 37mm 25mm TEM- .45 CPCM- 0.8 TEM- .45 PCM- 0.8 TEM- .45 PCM- 0.8 Pore Size (circle) Flow Meter Type (circle) Rotometer Dry-Cal Rotometer Dry-Cal Rotometer Dry-Cal NA NA Pump ID No. 612058 Flow Meter ID No. B 1410 - 5 1521 1723 Start Time Start Flow (L/min) 7.0 2.0 Z.0 2.0 1715 Stop Time /722 1725 <u>6.3</u> Stop Flow (L/min) 2.0 Z.6 Pump Fault? (circle) Мo Yes Nο Yes 100 cm2 Kitchen flood 100 cm2 North Redroom **Field Comments** 100 cm<sup>2</sup> 100 cm2 Living Room window sill 100 cm<sup>2</sup>-100 cm<sup>2</sup> Cassette Lot Number: 100 cm2 2 md/eve/ 23862 100 cm<sup>2</sup> 100 cm<sup>2</sup> hallway Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes No Entered (LFO) Volpe: Entered \_\_\_\_ Validated Entered Entered \_\_\_\_\_ Validated \_\_\_\_\_ Validated

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	400,

29

Project / Client PCE · EPA · VoloC

Author: Gregory Parana los

Activity: Stationery Air and dust samples will be completed as part of the PCE Sumples will be conducted IAW JAP Addendum, PCE, OS Sampling 12/1/03. Equipment: Ret ps 6 of this lastock. 92045-1 rotometer used to calibrate GICSAMAles. 0835 Orsite. CE-00032 pre-calibrate 0846 CE-00032 sturted. CE-00033 pre-culibrated. 0849 CE-00033 sturted. 1130 Onsite PIF completed with Mr Duffield. CE-00032,33 filter (K-OK. Flow Ck-OK. 1155 Office 1500 Onsite. Flow CK-OK. Filter CK-OK. Offsite 1705 Orsite. Pump 612058 calibrated with drycal B1610 51521 @ CI) Moffice 1725 CE-00035 collecte

Lucation 1212 Louisiana Aremio 1/12/24 Charlest / Chent PCE-EPA /Volo Author: Gregory Parana foll 2005, CE-00032 stopped, post calibrated and scaled. 2008 (E-00033 stopped, post decontaminated Offsite. Ref FSDS 0-000099, SA-000208
PEF- BD-000315. Samples
locked in sample storage @
COM office. 2040 Ont of logbook

# 154 Ski Rd

Sheet No.: SA- 000213

### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No:	<b>/0030/</b> Page No: _	3/-32 Sampling I	
ress: <u>/54_5</u>	Ki Kol	Owner/Tenant:	ulicia
ousiness Name:	N/A		
Land Use: Residen		cial Mining Roadway	Other (
Sampling Team: MA	CTEC CDM Other	Names: PARANA	75.143/04
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00036 .	CE- 00037	CE- 00038
Location ID	BD-003192	BD-003192	BD-003192
Sample Group	House	House	House
Location Description	2nd level	Ground level	Center of
	West Bedroom	Living Room	Basement
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS) FB-(field blank) LB-(lot blank)	FS B-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 (CM- 0.8)	TEM45 CM- 0.8	TEM45 CM- 0.8
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0387	1007	05913
Flow Meter ID No.	92045-1	92045-1	920.45-1
Start Date	1/13/04	1/13/04	1/13/04
Start Time	0830	0833	0835
Start Flow (L/min)	9.01	9.01 -	9.01
Stop Date	1/13/04	1/13/04	1/13/04
Stop Time	1940	1945	1949
Stop Flow (L/min)	9.01	9.21	9.2/
Pump fault? (circle)	No Yes NA	.No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	(No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments			
Casadha Lat Niverban			
Cassette Lot Number:	Archive Blank (circle): Yes No	Archive Otroly (simila): Van Ma	Arabina Blank (sirela): Vac. No.
QC (Field Team)	Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	Completed by	QC by	
(Provide Initials)	Completed by	QC by	<u>:</u>

Sheet No.: D- 000101

Logbook No: _//							ate: _///3	104	· <del></del>
, _ress: _ <u>/54_5</u>	ki Ro	<u>/,                                    </u>		Owner	r/Tenant:	Beau	heu		
Business Name:	ZA								
Land Use: Residential Sampling Team: MAC			Commercia er			Roadway ANA	Other (		)
Data Item	24/4/0	Cassett	e 1		Cassett	e 2	0	assette :	3
index iD	CE	- 0006	2			7			7
Location ID .		-003			/			•/	
Sample Group (circle)		House SI	hed,	Garage,	House, Si	hed,	Garage, H	ouse, Shed	•
(Subgroup of the property)	Pump He	ouse		Pump Ho	ouse /		Pump Hous	- 1	
	Other			Other			Other		
Location Description	Basemer	Ground	Floor.	Basemer	it, Ground	l Floor,	Basement.	Ground Flo	oor,
(circle)	Second			Second L	- 1		Second Le	ı	•
(Detailed description point within	Other	<i>_</i>		Other	<u>: /</u>		·Other		
the location) —	<del> </del>	<del></del>	<del></del>	11	<del></del>		11-7-1-1-1		<del></del>
Alabain Trans (alas(a)		ol Surfaces	)	High Traf	Surfaces		Horizontal : High Traffic	I	
Matrix Type (circle)	Other	il Aleas)		Other i	ALC ALCAS		Other	I.	
	<del>  = -</del>			+ <del>- 7</del>			<del>                                      </del>		4
itegory (circle)	FS' FB-(	field blank)	LB-(lot blank)	F\$ FB/(	ield blank)	LB-(lot blank)	FS FB-(fiel	d plank) LB-	(lot blank)
Sample Area (cm²) (circle)	100		AN00	100	200 3	00 NA	100 20	300	NA
Filter Diameter (circle)	25mm	37m	m ·	25mm	37mi	π	25mm	37mm	,
Pore Size (circle)	FEM45	PCM	- 0.8	TEM45	PCM	- 0.8	TEM45	PCM- 0.	θ
Flow Meter Type (circle)	Rotomete	r Ory-0	Cal NA	Rotomete	r Dry-C	Cal NA	Rotometer	Dry-Cal	NA
Pump ID No.		1205	8		Ma	113/04	- 1		
Flow Meter ID No.	BI	610-3	1521	4	-701				
Start Time	1440	1443	1447	1450	1454	1428			
Start Flow (L/min)	2.0	2.0	2.0	2.0	2.0	2.0			
Stop Time	1442	1445	1445	1452	1456	1500			
Stop Flow (L/min)	2.0	2.0	2.0	2.0	2.0	2.0			. :
Pump Fault? (circle)	(2)	Yes		<b>(</b> 0)	Yes	•	No	Yes	
Field Comments	100 cm <sup>2</sup>	•		100 cm²	round	dry Rm	100 cm	_ <i>j</i>	2.
Cassette Lot Number:	100 cm²	fcompo	el top	100 cm <sup>2</sup> -	baseme	~ton	100 cm2		1/13
23802	100 cm² (	remader in le	kuel	100 cm²-/		at top	100 cm²		-/
		nk (circle):		•	- •	/a. N.	Asabiya Dinet	(airein): Van	Nc
Entered (LFO)		ered		Archive Blar Entered	_		Archive Blank Entered		No
							<u> </u>		

For Field Team Completion QC by Completed by (Provide Initials)

154 Ski Rd - Benulieu Date 1/13/04 Project / Client PCE - EPA · Volpe 4-R- com Anthor: Gregory Purana. Activity: Stationary Air and Dust samples will be collected as part of the post cleanup evaluation. Sampling will be conducted in level DARE TAW SAP Addendum CSS, PCE Sampling 12/1/03. Retos 6 of this losbook Rotometer 92045-1 used tocalibrate sam, ses onsite. Pry. cal B1610/51521 used to calibrate law volume sampling pumo 612058@@M.Hice write to dust sampling. 0820 Onsite! CE-00036 pre-culibrated. 0830 CE-0003 G (2" /eve/) started. 65 CE-00037 pre-calibrated. 0833 CE-00037 (Living Room) started. CE . 00038 pre-calibrated. 0835 (E-00038 (Basement) started 1155 Onsite. Flow CK-OK, Filter CK-OK. P.F.F # BD-005192 completed with resident. 1210 Offsite. 11/13/00

154 SKi /30 treation Beautieuc Dale 1/13/04 Organicalian PCE- EPA/Volpe Author: Gregory Parana Los Com 1435 Onsite. Flow Ck-OK Filter Ck-OK 1500 CE-00062 collected and sealed. Exerpment decontaminated, Offsite. 1740 Onsite. Flow CK-OK Filter CK-OK. 1935 Onsite. 1940 CE-00036 Stopped, post culibrated and seuled. 1945 CE-00037 stopped, post calibrated and scaled. 1949 CE-0,0038 stopped, post culibrates and scaled. Equipment decontant-mated. Offsite to 505 Louisiana. Onsite CDM Office. Sumples 2030 Out of losbook.

# 2297 Kootenai River Rd

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100301 Page No.: 33-34, Site Visit Date: 119/04  Address: 2397 Kootenal River Rd. Structure Description: House Occupant: Mitch * Lisa Powers Phone Number: 293-9294  Owner (if different than occupant): MIKE Powers Phone Number: 293-6771  Business Name: N/A  Sampling Team: PARANA  Field Form Check Completed by (100% of forms): 100 Phone Number: 100 Phon						
Data Item	Value	Notes				
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Dat	e Removal Completed: 10/03				
Location of vermiculite removed indoors	Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:					
Location of vermiculite remaining indoors	Attic Walls (interior of exterior)  Crawl Space Basement Sub-floor  None Other:	About Bethroom				
Interior cleaning conducted during removal	Yes No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:					
Was carpet removed during removal activities?	Yes No NA					
Location of vermiculite removed outdoors	Driveway Flowerbed Garden_ Stockpile Yard None Other:	Garage AdjaceNt House				
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden  Stockpile Yard None  Other: UNKNOWN	·				

Data item	Value	- Notes
Pre-Sampling Interview (To be completed	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No	
	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
·	Immediately 1 to 2 months	
	3 to 4 months 5 to 6 months	· ·
	more than 6 months	·
How often do you-vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week	
	Twice a month Once a month	
	Less than once a month	
	Other:	
Heating Source	Wood/Coal Electric Propane/Gas	
	Other: fue (O)	
Heat Distribution	Forced air Radiant -	<del>-</del>
	Other:	·
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months	•
an meaning source may asset.	3 to 4 months 5 to 6 months	
	more than 6 months	
lave any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown .	Explain:
·	· ·	
addresses of other homes or properties where the occupants visit and may contain ermiculite	2293 Kootena. River Rd	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
	<del>-</del>	· ·
ddresses or names of business where ccupants work	Naturally Good Things Barnon Power's	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
<u>-</u>	Property	·
DDITIONAL INFORMATION		
		· · · · · · · · · · · · · · · · · · ·

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				v
1001	No	٠	PA-	

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR
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Field Logbook No:	7 Kootemui River	37-38 Sampling to Rd. Owner/Tenant:	h = Lisa Pawer s
ousiness Name:	NIA		
Land Use: Reside			Other ( )
Sampling Team: M	ACTEC CDM Other	Names: PARANA	
Person Sampled://	Powers SNA	l: <u>w/a</u> Task: <u>Post Cle</u>	en Up Evaluation
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE-00077	CE-00077	1-7
Location ID	BD-000790	BD-000790	
Sample Group	House	House	
Location Description	Shoulder	Shoulder	
Category (circle)	FS FB-(field blank) LB-(lot blank	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor	Indoor Outdoor	Indoor Outdoor
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
ore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	666348	626676	· /
Flow Meter ID No.	92045-1	92045-1	
Start Date	1/21/04	1/21/64	
Start Time	0820	1827	
Start Flow (L/min)	2.17	2.77	
Stop Date .	1/21/04	1/21/04	
Stop Time	1347 337	1854	
Stop Flow (L/min)	2.77	2.77	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?"	No Yes - NA	(No) Yes NA	No Yes NA
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
rield Comments	Resident stopped pump with 287 min.	Resident started pump. 27 minutes	P1/21/
Cassette Lot Number:		on counter	
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No_
2C (Field Team)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: Entered Validated
	Entered	- Citoroc - Cardated - Citoroc - Citoroc - Cardated	
	or Field Team Completion  Provide Initials)  Com	pleted by• QC by •	

vs 101503

Sheet No.: SA- 000157

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR			
Field Logbook No:	/8036/ Page No: Kootcala Rivec Rd	Sampling D	Date:
business Name:	CODTEMIA KINCI KIN	Owner/renant: _/ 7/7//	WAISG FOWERS
Land Use: Residen	tial School Commerc	ial Mining Roadway	Other ( )
Sampling Team: MA	CTEC CDM Other	Names:	
Data Itana	119/04	Connette 2	Concetto 2
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00078		7
Location ID	BD-000790		
Sample Group	House		
Location Description	Room		
Category (circle)	FS_FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	2141		
Flow Meter ID No.	92045-1		
Start Date	1/19/04		
Start Time	0810		
Start Flow (L/min)	4.09		
Stop Date	1/19/04		
Stop Time	1920		-
Stop Flow (L/min)	4.29		<u> </u>
Pump fault? (circle)	No Yes NA .	No Yes NA	No Yes NA
MET Station onsite?	(No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear  2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	Pre Post Clear  2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	670 min x 4.19 L/mm		1/19/04
Cassette Lot Number:	= 2807	4	
32415	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: Validated
<del></del>	<del></del>	<del></del>	

For Field Team Completion	Completed by •	QC by •
(Provide Initials)	Completed by C	

Sheet No.: D- 000107

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST Id Logbook No: 100301 Page No: 33,34 Sampling Date: 1/19/04

Bress: 2297 Kootenai River Rd. Owner/Tenant: Mitch - Lisa PowerS Business Name: N/A Land Use: Residentia School Commercial Mining Roadway Other ( Sampling Team: MACTEC (CDM Other \_\_\_\_\_ Names:\_PARANA Data Item Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00081 Location ID BD-000 790 Garage (House) Shed, Garage, House, Shed. Garage, House, Shedd, Sample Group (circle) Pumo House Pump House Pump House (Subgroup of the property) Other Other Other\_ Location Description Basement, Ground Floor Basement, Ground Floor, Basement, Ground Floor, Second Level Second Level Second Level (circle) Other Other Other (Detailed description point within the location) Horizontal Surfaces Horizontal Surfaces Horizontal Surfaces High Traffic Areas High Traffic Areas High Traffic Areas Matrix Type (circle) Other Other Other FS')FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) tegory (circle) Sample Area (cm2) 200 100 100 1200 300 300 100 NA NA (circle) 400 Filter Diameter (circle) 25mm 37mm 37mm 37mm 25mm 25mm TEM- .45 PCM- 0.8 TEM- 45 PCM- 0:8 Pore Size (circle)-PCM- 0.8 TEM- .45 (Dry-Cal) Flow Meter Type (circle) Rotometer Rotometer Rotometer Dry-Cal NA Dry-Cal NA Pump ID No. Flow Meter ID No. 1523 1513 Start Time 45/6 1511 Stait Flow (L/min) 2.0 Stop Time 1518 1521 01/19/04 Stop Flow (L/min) 2.0 2.0 2.0 Pump Fault? (circle) 100 cm2 - LIVIND Room 100 cm2 / Feb 20 **Field Comments** 100 cm 100 cm² - Kitchen top of Retiral gerator 100 cm<sup>2</sup> 100 cm Cassette Lot Number: 23802 100 cm2 - Living Room 100 cm<sup>2</sup> 100 cm<sup>2</sup> Archive Blank (circle): Yes No Archive Blank (circle): Yes No Archive Blank (circle): Yes No Entered (LFO) XXX Volpe: Entered Validated Entered Validated Entered —— Validated

For Field Team Completion	Completed by	GP	QC by	7	<u> </u>
(Provide Initials)	Completed by	· []	CC by	10	.

### Residential Activity Log

Resident Address: 2297 Kootena. River Rd.
Volunteer Name: Mitch + Lisa Powers
Sampling Date(s):
Personal air sample number (s): <u>CE-000 77</u>
FSDS number(s): PA-000033, SA-000/87

	Date/Time Interval	Go Outside?	Pump problem?	General Activities
Lisa	1/20/04	Yes ( mins) Describe	Yes (describe)	Computer
-	9-10	Describe		
<b>b</b> lein	10-12:15	(No) Yes (mins) Describe	No Yes (describe)	Computer
Visa A	12:15 5:00	(No ) Yes ( mins) Describe	No Yes (describe)	elanging eines weetch TV
nitch !	5:00	No Yes ( mins) Describe	No Yes (describe)	
		No Yes ( mins) Describe	No Yes (describe)	
	-	No Yes ( mins) Describe	No Yes (describe)	
· [				

Note: Continue on second page if necessary.

293-1374

466248

### Residential Activity Log

Resident Address: 2297 Kootenai River Rd
Volunteer Name: Lisa - Mitch Powers
Sampling Date(s): 1/21/04
Personal air sample number (s): CE-00077
FSDS number(s): PA-000031 , SA-000209

	Date/Time Interval	Go Outside?	Pump problem?	General Activities
L150	8:50 1/11 1:50	Yes ( mins) Describe	Yes (describe)	Vistes launday
WA	3.45	No Yes (mins) Describe	Yes (describe)	to boundary
miter	5.35	res ( mins) Describe	No Yes (describe)	Cwil
	. <del>-</del>	No Yes ( mins) Describe	No Yes (describe)	-
		No Yes ( mins) Describe	No Yes (describe)	. <del>-</del>
		No Yes ( mins) Describe	No Yes (describe) 	

Note: Continue on second page if necessary.

Gres

293-1374

### Residential Activity Log

Resident Address: 2297 Kootenai River Rd.
Volunteer Name: Mitch & Lisa Powers
Sampling Date(s): 1 19 04
Personal air sample number (s): CE-00078 CE-00077
FSDS number(s): 5A-000167 PA-000032 D-000107

	Date/Time Interval	Go Outside?	Pump problem?	General Activities
witch	1/19/04 8:30 - 10:15	Yes ( mins) Describe	Yes (describe)	slept on couch
<b>6</b> 4	12:05	No Yes ( mins) Describe I'm ing to fut diction outside	(No ) Yes (describe)	ran vaccient laundry comploter
Mitch	12:05 3:30	No Yes (mins) Describe 10 second to gat coout of car at 12:25	Yes (describe)	Computer
482	3:30	(ND) Yes ( mins) Describe	Yes (describe)	Make suppor machine quit or me
		No Yes ( mins) Describe	No Yes (describe)	
		No Yes (mins) Describe	No Yes (describe)	
· Ц			<del> </del>	

Note: Continue on second page if necessary.

Grey 293-1374

2297 Kootenia River Rd. - Mitch Povers Date 1/19/04 Location PCE Project/Client VolacEPA Author: Gregory Parana, Activity: Stationary Air, Personal Hir and dust samples will be collected as day 1 of 3 for the PCE. Sumpling will be conducted in LevelDPPE IAW SAP Addendum, CSS, PCE Sumpling 1211/04. Rotometer 42045-1 used to calibrate samples Dry Cal B1610 - 51521 used to calibrate LV pump for dust Onsite 0800. CE-00077, 78 pre-calibrated. 0808 CE-00077 started on Mitch lovers. 0810 CE-000,78 started (livery Pm). 1130 Ousite. Flow Ck OK Fliffer CK-OK. CE-00077 ON LISS TOWERS. Volunteers completing Residential Activity Log. Offsite to 118 Cal. 1458 (E-00077 stopped, post calibrated CE-00077 1459 CE-00077 started

2297 Kootenai River Rd. 2297 Kootenai River Rd Lescation Power's Mitch - Liss Date 1/20/04 Constion Power's Date 1/12/04 Project. Client PCE - EPA / Volpe Project / Client PCE: EPA. Vole Author: Gregory Parane CDM Author Gregory Parana Kors COMI CE-00078 flow CK-OK Filter Ox Activity. Day 2 of 3. Stationary 1525 (E-000 81 (Dust) collected. Air and personal air samples PIF BD-000790 completed will continue to be collected 1850 gette M. tch & Lisa Powers. 1830 - Recieved cull from Lisa Poweron Mitch & Lise Powers. Ket PS 33. 0850 ONSITE. CE-00077 pre-calibrated on pump 666348. Pump stopped. 0855 CE-00077 placedon Lisa 1910 Onsite. CE-00077 stopped, buttery toners and started Residential was dead. 22/min Noted on . counter. CE-00077 post-calibrates. Activity Los given to Lisa to 1920 CE-00078 stopped, post-calibrate complete. CE 000 78 pre-cultural Both samples scaled and stop 119/64 0900 CE-00078 started Offsite. 1255 Onsite Epuipment decontaminated. CE-00078 Flow Ck-OK, Filter OK. Residential Activity log recieved 1310 CE-00077 stopped. Post Cal. from tenants. Ret FSDS 5A-000167 PA-000032. Offsite. CE-00077 placed on pump 666248 and calibrated. 1935 Ovsite CDM office. Sumples 1313 CE.00077 started (placed on list) placed in sample storage. 1702 Onsite Flow CK-OK Filter 1950 Out of logbook. 2020 Onsite. 2022 CE-00077 stapped and post 2025 CE-000 78 stopped and post calibrated 1/20/00

2297 Kootengi River Rd 2297 Kootenui River Rel. Han Mitch & Lisa Towers Unio 1/20/04 tocation Mitch + Lisa Powers Unin 1/21/04 Proje ! Chent PCE EPA/Volpe : EN ELIBER PCE - ERA / Volpe Anthor: Gregory Parana lyste Com Anthor: Grayory Tarana Port COM Equipment decontaminated. Offsite Activity: Day Sot 3 collecting 2055 Onsite COM Office. Sampled PlE samples, Ret Po 33 for locked in sample storage. details of sumpling. Ref FSDS 5A-000187, PA-000033 8847 - Onsite CE-00077 placed ON tisa Popilailo4 pump 666348 PEF/Residential Activity Log BR-000780. 2130 Out of logbook. and pre-culibrated. 0850 CE-00077 placed on Lisa and started, RAL given to resident to complete. CE-00078 placed of HV pump 2141 and pre-calibrated. 0856 CE-00078 started. ---1120 Onsite. CE-00077 flow Ck. Filter Ck-OK. -1125 CE-00078 Stopped Flow 1127 CE-00078 started. -LISA Powers said they were leaving. She would stop pump and start pump when she returns. 1435 Onsite. Resident not present. 287 minutes on LV pump 666348.

2297 Kootenai River Rd Mitch towers 15.Mp //21/04 Proported from PCE - EPA Volpe Anthor Gregory Parana Lyte COM. CE-00077 post culibrated. CE-00077
placed on pump 626676 and
culibrated. Pamp placed on hold.
CE-00078 Flow CK-OK Filter CK-OK. 1700 Onsite - Resident not home. 1850 Onsite. 1854 CE-00077 Stopped. 27 minutes or counter. Lisa Powers indicated that they just came home. 1857 CE-00078 stopped. Samples
post calibrated and scaled.

Equipment decontaminated.
1900 Offsite to (DM office. , 1915 Samples placed in sample storage, ReffSOS PA-000031, SA-000209 1925 Out of losbook. 13 113 WO.k. 1/21/04

# 1417 Washington Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100361	Page No.: <u>39</u> Site Visit Date:/	126/04
Address: 1417 Washington	Avc. Structure Description	House
Occupant: Tess Jordan	Phone	Number: 293-7911 (Heavy
Owner (if different than occupant):	dith Jordan - Decease hone	Number:
Business Name: NA		
Sampling Team: PARANA		
Field Form Check Completed by (100% of	of forms): VO_05	
	7	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: 10103
Location of vermiculite removed indoors	Attic (Watts Interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other:	10.41
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	2nd/eve/
	Crawl Space Basement Sub-floor	
	None Other:	
Interior cleaning conducted during removal	Yes No	
	If Yes, which floors:	
		-
	Basement Ground Gecond	
<u> </u>	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	-
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	Entire yard
	Stockpile (Yard) None	9164
_	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
·	Stockpile Yard None	_
	Other:	_ :
	Other	[ _ <i>i</i>

	Value	Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	Provided but not used
	Immediately 1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week Twice a month Once a month Less than once a month Other:	Never
deating Source	Wood Coal Electric Propane/Gas Other:	
leat Distribution -	Forced air Radiant Other:	
low soon after the removal was a forced ir heating source first used?	1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
ave any of the occupants been in contact ith any vermiculite since the removal was ompleted?	Yes No - Unknown	Explain:
ddresses of other homes or properties here the occupants visit and may contain ermiculite	None	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where cupants work	Henry's Restnarant	To be completed by field personne Do these properties currently-have indoor or outdoor vermiculite?
~ _	·	<u> </u>

Sheet No.: SA-\_\_000175

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Sampling Date: 1/26/04 Field Logbook No: 100361 Page No: 39 ress: 1417 Washington Owner/Tenant: /255 Jordan ousiness Name: N/A Land Use: (Residentia) School Commercial Mining Roadway Other ( Names: PARAIVA Sampling Team: MACTEC CDM Other\_ 1186/04 1126/04 Cassette 3 Data Item Cassette 1 Cassette 2 Index ID CE- 00106 CE- 00101 CE- 00102 Location ID BD-002504 BD-002504 BD-002504 House Sample Group **Location Description** Kitchen NIA Category (circle) -FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) Indoor Indoor Indoo Matrix Type (circle) Outdoor Outdoor -- Outdoor Filter Diameter (circle) 25mm. 37mm 25mm 37mm 25mm 37mm Pore Size (circle) (PCM- 0.8) PCM- 0.8 PCM- 0.8 TEM- .45 TEM- .45 TEM- .45 Rotometer) NA w Meter Type (circle) DryCal Rotometer. DryCal Rotometer DryCal 05910 Pump ID Number Flow Meter ID No. 92045-1 92045-1 1/26/04 1/26/04 Start Date 0822 Start Time 9.03. 9.03 Start Flow (L/min) 1/26/04 1/26/04 Stop Date 1947 1945 Stop Time 1/26/04 9.03 Stop Flow (L/min) Pump fault? (circle) NAV No. No Yes NΑ Yes NA No Yes ΝA NΑ MET Station onsite? No Yes NA No Yes ·No Yes Post Sample Type Clear Pre Post Clear Pre Post Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear ( **Eield Comments** TE 1/24/04 3/020/ Cassette Lot Number: 4<del>824 | \$</del>9 Archive Blank (circle): Yes Archive Blank (circle): ( Archive Blank (circle): Yes (Field Team) Volpe: Volpe: Volpe: Entered (LFO) Entered Validated Entered Validated Validated Entered

Completed by --

QC by

٧S	101503
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For Field Team Completion

TProvide Initials)

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Sheet N	lo∴.	_D-			•

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST					
d Logbook No: 100301 Page No: 39 Sampling Date: 1/26/04					
1ress: <u>/4/7 W</u>	Inshing ton Ave.	_ Owner/Tenant:	ordan		
Business Name: N	<del></del>				
_	al School Commercia		Other ( )		
Sampling Team: MAC	TEC CDM Other	_ Names: <i>PARANA</i>	<del></del>		
Data Item	/ 1/26/04 Cassette 1	Cassette 2	Cassette 3		
	T/				
Index ID	CE- 00103				
		1	<del></del>		
Location ID	BD-002504				
Sample Group (circle)	Garage, House Shed,	Garage, House, Shed	Garage, House, Shed,		
(Subgroup of the property)	Pump House	Pump House	Pump House		
	Other	Other	Other		
Location Description	Basement, Ground Floor,	Basement, Ground Floor,	Basement, Ground Floor,		
(circle)	Second Level	Second Level	Second Level		
(Detailed description point within the location)	Other	Other	Other		
,	Horizontal Surfaces	Horizontal Surfaces	Horizontal Surfaces		
Matrix Type (circle)	High Traffic Areas	High Traffic Areas	High Traffid Areas		
<b></b>	Other	Other	Other		
stegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(feld blank) LB-(lot blank)		
Sample Area (cm²) (circle)	100 200 300 NA	100 200 300 NA	100 200 300 NA		
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm		
Pore Size (circle)	TEM45 PCM- 0.8	TEM-,45 PCM- 0.8	TEM- 45 PCM- 0.8 _		
Flow Meter Type (circle)	Rotometer (Dry-Cal) NA	Rotometer Dry-Cal NA	Roton eter Dry-Cal NA		
Pump ID No.	502077	1/2 / 1/2			
Flow Meter ID No.	B1610, 51521	L	· ·		
Start Time	1149 1153 1156	1200			
Start Flow (L/min)	2.0 2.0 2.0	2.0			
Stop Time	1/51 1/55 1/58	/202			
Stop Flow (L/min)	2.0 2.0 2.0	2.0			
Pump Fault? (circle)	Ne Yes	No Yes	No Yes		
Field Comments	100 cm² · Fland Room	100 cm² hot in uter heat	100 cm²		
<del>_</del> .	level.	. G.NOTWATET MEATE	_		
	100 cm2- Ground level	100 cm <sup>2</sup>	100 cm²		
Cassette Lot Number:	Kitshen-Ton of		1/2.		
23802	Adriate ntor. 100 cm - 2 nd level	100 cm²	100 cm <sup>2</sup>		
	floor	1			
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No		
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated		

For Field Team Completion	Camplered by	QC by
(Provide Initials)	Completed by	ac by

1417 Washington to dien Tess Jordan Date 1/26/04 13 ad / Client PCE - EPA / Volpe Author: Gregory Parana Ars 12 COM Activity: Stationary Air and Dust samples will be collected us part of the PCE - Sampling will be conducted in level DAPE IAW SAP Addendum CSS PCE Sampling 1/12/03. Equipment Ref 13 6. 0818 Onsité. CE 00102 pre-calibrates 0822 CE-00102 started (200/e-cl.) CE-00101 pre calibrated. OF24 CE-00101 started . -1135 Onsite. CE-00106-Blank-Enposed and scaled. 1202 CE-00103 (Blanks) 1/26/04 busely ) ust sample collected-scaled. 1405 Orsite PIFcompleted with Resident 1405 Onsite. Flow Ck-Filter Ck: OK. 1640 Onsite. Flow Ck. F. Her Ck-OK 1945 CE-00102 stopped. 1947 CE-00101 stopped. Samolosculad. Equipment deconned 2010 Onsite CDM offices. Samplesplaced INSAmple Storage. Ref BB SA-000175 13.000117 2035 Out of log book

## 233 W. Larch

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 106361 Page No.: 46-41 Site Visit Date: 1/27/64  Address: 233 W. Lach St. Structure Description: House Occupant: Revice Conductor Phone Number: 273-6695  Owner (if different than occupant): Peterson Phone Number: 273-6695  Owner (if different than occupant): Peterson Phone Number: 273-6695  Owner (if different than occupant): Peterson Phone Number: 273-6695  Owner (if different than occupant): Peterson Phone Number: 273-6695  Owner (if different than occupant): P
Owner (if different than occupant): Pticson Phone Number: M/A  Business Name: M/A  Sampling Team: PARANA  Field Form Check Completed by (100% of forms):  Data Item Value Notes  CLEAN-UP SUMMARY (To be completed using removal completion folders) Date Removal Completed: 22/03  Location of vermiculite removed indoors Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:  Location of vermiculite remaining indoors Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal Yes No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Owner (if different than occupant): Ptroson Phone Number: MA  Business Name: MA  Sampling Team: PARANA  Field Form Check Completed by (100% of forms): Data Item Value Notes  CLEAN-UP SUMMARY (To be completed using removal completion folders) Data Removal Completed: Data Item Value Notes  CLEAN-UP SUMMARY (To be completed using removal completion folders) Data Removal Completed: Data Item Other: Data Item Value Notes  Crawl Space Basement Sub-floor  Other: Valls (interior or exterior)  Crawl Space Basement Sub-floor  None Other: None Other: None Other: Basement Sub-floor  None Other: Space Basement Sub-floor  None Other: None Other: Space Basement Sub-floor  Other: Space Basement Sub-floor  None Other: Space Basement Sub-floor  None Other: Space Basement Sub-floor  Other: Space Basement Sub-floor  None Other: Space Basement Sub-floor
Field Form Check Completed by (100% of forms):    Data Item
Data Item  Value  Notes  CLEAN-UP SUMMARY (To be completed using removal completion folders)  Location of vermiculite removed indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:  Location of vermiculite remaining indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  None  Other:  Interior cleaning conducted during removal  Yes  No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:  Oth
Data Item  Value  Notes  CLEAN-UP SUMMARY (To be completed using removal completion folders)  Location of vermiculite removed indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:  Location of vermiculite remaining indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  None  Other:  Interior cleaning conducted during removal  Yes  No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
CLEAN-UP SUMMARY (To be completed using removal completion folders)  Location of vermiculite removed indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:  Crawl Space Basement Sub-floor  Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
CLEAN-UP SUMMARY (To be completed using removal completion folders)  Location of vermiculite removed indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  Other:  Location of vermiculite remaining indoors  Attic  Walls (interior or exterior)  Crawl Space Basement Sub-floor  Crawl Space Basement Sub-floor  None  Other:  Interior cleaning conducted during removal  Yes  No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Location of vermiculite removed indoors  Attic  Crawl Space Basement Sub-floor  Other:  Location of vermiculite remaining indoors  Attic  Crawl Space Basement Sub-floor  Crawl Space Basement Sub-floor  None  Other:  Interior cleaning conducted during removal  Yes  No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Crawl Space Basement Sub-floor  Other:  Location of vermiculite remaining indoors  Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Location of vermiculite remaining indoors  Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal  Yes No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Location of vermiculite remaining indoors  Attic Walls (interior or exterior)  Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal  Yes No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Crawl Space Basement Sub-floor  None Other:  Interior cleaning conducted during removal Yes No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Interior cleaning conducted during removal  Yes  No  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Interior cleaning conducted during removal  If Yes, which floors:  Basement Ground Second  Garage Attic Other:
If Yes, which floors:  Basement Ground Second  Garage Attic Other:
Basement Ground Second  Garage Attic Other:
Garage Attic Other:
Who comed some and district remarked Van / No 1 MA
Was carpet removed during removal Yes No NA activities?
Location of vermiculite removed outdoors Driveway Flowerbed Garden
Stockpile Yard None
Other:
Location of vermiculite remaining outdoors Driveway Flowerbed Garden
_ Stockpile Yard None
Other:

Data Item	Value	Notes
Pre-Sampling Interview (To be completed	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	Justpick it up 1/26@infocente
	Immediately 1 to 2 months  3 to 4 months 5 to 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	more than 6 months  Once a week  Twice a month  Once a month	N/A
	Less than once a month Other:	
Heating Source	Wood/Coal Electric Propane/Gas Other: Fac   O.	
Heat Distribution	Forced air Radiant Other:	
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	UNKNOWN
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain: Ploor of 191121/04 Ground level walls during receptical replacement
Addresses of other homes or properties where the occupants visit and may contain vermiculite	43 St. Regis Rd. Troy MT	To be completed by field personnel:  Do these properties currently have indoor or outdoor vermiculite?  -
Addresses or names of business where occupants work	Pizza Hut Payne Machinery	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
DDITIONAL INFORMATION	<u> </u>	

Sheet No.: SA- 000178

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100301 Page No: 40-4/ Sampling Date 1/28/04 1/27/04 Owned Tenant: KesiNA Contince Idress: 233 W Lacch St. Peterson Terry & Carolyn siness Name: W/A Land Use: Residentia School Other ( Commercial Minina Roadway Sampling Team: MACTEC (CDM)Other Names: PARANA m 1/27/04 101/04 1/27/04 Cassette 3 Data Item Cassette 1 Cassette 2 Index ID CE- 00109 CE- 00107 CE- 00108 Location ID BD-000348 BB-000348 BD-000348 House Sample Group House Busement Ground level Location Description Basement Kitchen Category (circle) FS) FB-(field blank) LB-(lot blank) FS 身B-(field blank) LB-(lot blank) FB-(field blank) LB-(lot blank) Indoor Outdoor Outdoor Outdoor Matrix Type (circle) Indoor Indoor 25mm) 37mm 25mm 25mm 37mm Filter Diameter (circle) 37mm Pore Size (circle) PCM- 0.8 ₽CM- 0.8 (PCM- 0.8) TEM- .45 TEM- .45 TEM- 45 Rotometer (Rotometer) DrvCal DryCal Rotometer DryCal W Meter Type (circle) NA 05910 05913 Pump ID Number 92045-1 92045-1 Flow Meter ID No. 92045-1 1/27/04 1/27/04 1/27/04 Start Date 820 Start Time 1823 9.03 9.03 Start Flow (L/min) 1/27/04 1/27/04 Stop Date 1942 1942 1949 1945 Stop Time 9.03 9.03 9.03 Stop Flow (L/min) No. No Pump fault? (circle) Yes NA No Yes NA Yes NA No MET Station onsite? No Yes NΑ No<sup>-</sup> Yes NA Yes NA Post Sample Type Post Clear Post Clear Pre Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear a 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear / Field Comments 1/27/04 Cassette Lot Number: 32415 Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes No Field Team) • Volpe: Volpe: Volpe: Entered (LFO) Entered Validated Entered Validated Entered Validated For Field Team Completion

QC by . Completed by . (Provide Initials)

Continue Tenant becalian 233 W. Larch St. Date 1/27/04 Depart admit PCE- EPA/Volpe. Author: Gregory Parana COM Stugary Town Activity: Stationary Air and Dust Samples will be collected in the house: BB-000348. Sampling will be conducted in level DPPE IAW SAP Addendum, CSS, PCE Sampling, 12/1103. Equipment: Ket ps 6 of This losbook. Rotometer 92045-1 will be used to calibrate samples. Pump (LV) 502077 calibrated with Dry Cal \$1610-51521@ 0800 1 0810 Onsite. CE-00107 pie-cal. bruted. 0820 CE-00107 (Busement) started. CE-00108 pre- calibrated. 0823 CE-00108 (Kitchen) started. CE-00109 pre-calibrated. 0825 CE-00109 (2nd/evel) started. Ottsite. 1130 Onside-Flow Ck, Filter CK-OK. 1200 (E-00110 (dust) collected. 1514/01/27/04. PIEBO-000548 completed with resident. 1510 Onsite. Flow Ck. Filter Ck. OK.

1-ration 233 V. Larch St. Date 1/27/04 Fragoct/Client PCE-EPA/Volpe Author: George Town COM Sont 1942 CE-00107 stopped post Culibrated and scaled. 1945 CE-00108 stopped post culibrated and scaled. 1949 CE-00109 stopped, post culibrated and scaled. Equipment decontaminated and removed from site. SA-000176, D-000119. 2010 Samples locked in CDM office. 2030 Ont of los book -

Continue -Tenant

# 38 Spencer Hill Way

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

1/1/28/04 Page No.: 42-43 Site Visit Date: 1-28-04 Field Logbook No.: 10030 Structure Description: House 293-4518 Phone Number: Phone Number: NIA Owner (if different than occupant):\_ MIA Business Name:\_\_ PARANA, COM Sampling Team: Field Form Check Completed by (100% of forms); Notes Data Item Value CLEAN-UP SUMMARY (To be completed using removal completion folders) Date Removal Completed: 0 Walls (interior or exterior) Location of vermiculite removed indoors Attic Crawl Space Basement Sub-floor ONP Other: parge was also clean Attic Walls (interior or exterior) Location of vermiculite remaining indoors Crawl Space Basement Sub-floor None Other: Yes Interior cleaning conducted during removal Nο If Yes, which floors: Basement (Ground Second Garage Attic Other: Yes NA Was carpet removed during removal No activities? Flowerbed Location of vermiculite removed outdoors Driveway Garden Stockpile None Other: Location of vermiculite remaining outdoors Driveway Flowerbed Garden None Stockpile Yard Other:

Data Item	Value	Notes
Pre-Sampling Interview (To be comple	ted with resident)	<del>-</del>
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No If Yes, how long after the removal was	Recieved HEP+ vacon 1/16/04.
	completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months	
	3 to 4 months 5 to 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month  Conce a month  Less than once a month	
Heating Source	Other:	
leat Distribution	Other: Radiant Other:	Wood - Rodiant Fuel Oil -
fow soon after the removal was a forced ir heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	dmonths
lave any of the occupants been in conta- ith any vermiculite since the removal wa ompleted?		Explain:
ddresses of other homes or properties here the occupants visit and may contai ermiculite	6683 Farm to Market Rd	To be completed by field personnel Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where cupants work	Refired	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
· , - · · ·		_
	_ <del></del>	<del></del>

Sheet No.: PA-\_\_000024

### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

Field Logbook No: _		<b>42-43</b> Sampling [	Date:
	sec Hill Ave. Way you	վշխվ Owner/Tenant: <u>Kice</u>	
Business Name:	MIA	· · · · · · · · · · · · · · · · · · ·	011 (
Land Use: Residen		<u> </u>	Other ( )
	ACTEC CDM Other SNN:	Names: / MANA	un Up Evaluation
Terson Sampled	1/28/04 SINV.	Task. TAST CIE	AN UP A VALUE AT 1800
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00111		
Location ID	BA-002380		
Sample Group	House		
Location Description	Shoulder		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS F8-(field Blank)/LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor	Indoor Outdoor	Indoor Oyldoor
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
re Size (circle)	TEM45 PCM- 0.8	TEN45 PCM40.8	TEM45 FCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal	Rotometer DryCal NA
Pump ID Number	612058	626676	1
Flow Meter ID No.	92045-1	92045-1	
Start Date	1/28/04	1/28/04	
Start Time	0835	1256	
Start Flow (L/min)	2,77	2.77	
Stop Date	1/28/04	1/28/04	· /-
Stop Time	1238	1800	
Stop Flow (L/min)	2.77	2.77	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA .	No Yes NA	No Yes NA
Sample Type	TWA EXC (NA)	TWA EXC NA	TWA EXC NA
Field Comments	243 on counter 243 on x 2.77 L/mag	564 ania x 2.79 L/min 304 = 842 L	1/28/04
Cassette Lot Number:	= 6731		1
QC (Field Team) UB	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
$\mathcal{O}$			

or Field Team Completion	Completed by •	QC bys
Provide Initials)	Completed by C	( 40 0)

000136

Sheet No.: D- \_\_\_\_UUU

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST Field Logbook No: /0036/ Business Name: NIA Land Use: (Residential School Commercial Roadway Mining Other ( Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA 161/30/04 151/30/64 Data Item Cassette 2 Cassette 3 Cassette 1 CE-00116 CE- 00117 CE- 00116 index ID RD-002380 Location ID 82-002380 BD-002380 Garage House Shed. Garage, House, Shed. Garage, House, Shed, Sample Group (circle) Pump House Pump House alor Blank Pump House (Subgroup of the property) Other\_ Other Location Description Basement, Ground Floor, Basement, Ground Floor, Basement, Ground Floor, Second Level Second Level Second Level (circle) Other ~/\_\_\_\_ Other Other (Detailed\_description point within the locationT Horizontal Surfaces Horizontal Surfaces Horizontal Surfaces High Traffic Areas Matrix Type (circle) High Traffic Areas High Traffic Areas Other Other\_N/A Other\_ FS)FB-(field blank) LB-(lot blank) FS (field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) egory (circle) Sample Area (cm²) 100 200 300 100 200 100 NA T 200 300 NΑ (circle) Filter Diameter (circle) 25mm 25mm 37mm 37mm 25mm 37mm TEM- 45) Pore Size (circle) PCM- 4-8 TEM- 452 PCM- 0.8 TEM- .45 PCM- 0.8 Rotometer Dry-Cal Dry-Cal Dry-Cal NA Rotometer Rotometer Flow Meter Type (circle) 626666 Pump ID No. N/A B1610 - 51521 Flow Meter ID No. 1145 1149 1154 1157 Start Time Start Flow (L/min) 7.0 2.0 2.0 2.0 115% Stop Time //47 //59 Stop Flow (L/min) 2.0 2.0 1/30/04 2.0 2.0 Pump Fault? (circle) 100 cm2 - LIVING ROOM Field Comments 100 cm<sup>2</sup> 100 cm2 - Laundry Room 100 cm2 deste 100 cm<sup>2</sup> Cassette Lot Number: 23802 100 cm²- Kitchen wandunoom² 100 cm<sup>2</sup> Archive Blank (circle): Yes No Archive Blank (circle): Yes Archive Blank (circle): Yes Entered (LFO) 125 Volpe: Entered Validated Entered Validated Entered --- Validated \_\_

For Field Team Completion	Completed by	ac by 1
(Provide Initials)	Completed by	L

ternion 38 Spencer Hill Way . 120 1/28/04 Trenton 38 Spencer Hill Way water 1/28/04 the great Client PCE - EPA/VolpC Projection PCE - EPA/Volpe Anthor: Gregory Parana ATPL COM Author: Gregory Facana 12 CDM Activity: Day 1 of 3. Stationary O CE-00111 Flow CK-OK. Filter OK. Air and Personal Air samples CE-00112 Flow Ck - Filter Ck-OK. will be collected over a 3 day 1240 Contacted by Leonard Rice. period. Dust sample will be Statedthat pump stopped. collected. All sumples will be 1250 Ousite LV pump 612058 collected in BD-002380. Sampling Low Battery fault. 105 to Calibrated sample CE-00111. will be conducted in level DPPE IAW SAP Addendum, CSS, PCE Place CE. OOII for LV pump Sumpling 12/1103. Equipment. 626676 and calibrated. Reference past 6 of this losbook. 2 x 1256 CE-00111 started ONRR 0815 Onsité. CE-00111 pre-culibrated. 0835 CE-00111 placed on Leonard Rice CE-00112 Flow, Filter CK-OK \$1608 Onsite. CE-00111,112 The Rice's will switch the pump Flow and titler CK - OK. Kice's leaving @ 1830. Rejuest -sample between each other CE-00112 (SA) pre-calibrated. Surple stopped @ 1800. 0840 CE-00112 started. Offsite. 71756 CE-00112 stopped. Post 0850 1108 Louisiana Ave. No answer Calibrated and scaled. E1800 CE-00111 stopped. Pest @ Door. Called and left messuge on answering machine. calibrated and scaled. 1110 Onsite 38 Spencer Hill way. Samples placed IN sample storage PIFBO-002380 completed CCBM office. 1835 Out of with Leonard and Ruth Kick

noution 385 percer Hill Way Date 1/29/04 Project / Christ PCE - EPA / Vulpe Anthor: Gregory Parone COM Ann Activity: 2073 of the PCE. Ref. Pg42. Equipment Ref Ps 6. 0810 ONS, Fé. CE-00111 ON pump 626676 und calibrated. 0820 CE-00111 Started. LR CE-00112 pre-cal. brated. 0824 CE-00112 started. Residential Activity los siven to resident. 1120 Orsite. Resident did not unswer door. Offsite to 1202 Lour Idaho. 1440 ONsite. KR wearing sample pump. 1450 CE-00111 stopped. Postalbinted. CE-00111 placed on LV Pump 666248 and calibrated. 1453 CE-00111 started. Sample RR. Filter OK. CE-00112 Filter 10% loaded. Flow-OK. 1510 Offsite to 1202 Idaho Ave - @ 1945 Onsite CE-00111 stopped, Postculed. 1947 (E-00112 stopped-Post Calibrated. Fourpment deconned. 2010, CCDA office. Samples locked. RefFSD5 5A-000178, PA-000051

Location 38 Spencer Hill Way 1/30/04 Project / Ollent PCE-EPA | Volpe Anthor: Gregory Parana CDM 120 Activity: Day 3 of 3 of the PCE. Ref. P. 42. 0725 LV 626666 calibrated with Dig Cal B1610. 51521. 0810 Onsite. CE-000111 calibrated ON LV 626676. 0815 CE-000111 started, placed on LR. CE-000112 calibrated on HV 2141. 0820 CE-000112 started. Offsite to Help 50. -1125 ONSite Flow Ck Filter Ck-OK 1414 Onsite - Flow-Filter Ck-Ok 1605 Onsite. 1607 CE-000111 Stopped calibrated. 1610 (E-000111 Startedon pump 666248 Late Entry 1159 (6-00116 (dust) collected CE-00117 (Blank) exposed and scaled! 1933 Onsite. 1935 CE-000111 stopped. 1439 CE-000112 stopped. Sumples rost calibrated and scaled Eugenest deconned 1950 Unsite a office. Samples locked in sample storage Ketsis SA-000182, PA-000052, D-000136.

100304

Rite in the Rain®

ALL-WEATHER WRITING PAPER

### TRANSIT

All-Weather Notebook No. 301

Libby Ashestos Project
Post Cleanup Evaluation
12/15-03 to 1/29/04

4 s/e" x 7" - 48 Numbered Pages



Libby Asbestos Project CDM/Mactec Contractor Logbook

Return to:	
Dave Schroeder .	
318 Louisiana Avenue	
Libby, MT 59923	
406-293-8595	

#### Every Page:

- > Initial and date all pages
- > Sign and date last entry of the day
- Line out once, initial and date all changes
- > NO blank lines

#### Daily Entries:

- > Author
- > Date/Time
- > Weather
- > Activities
- Persons on team
- > Level of PPE
- > Title of governing document
- > Serial numbers of equipment

#### CONTENTS

PAGE	REFERENCE	DATE
3	603 W. 10th St. 11	12/15/03
13	3796 Hwy 2 South	1/8/84
	713 Michigan Arc.	1/12/04
	505 Louisiana Auc.	1/13/04
	1118 California Ave	1/19/04
	1120 California Ave	1/20/04
	1231 Nevada Ave.	1/26/04
	1202 Ideho Ave.	1/25/04

BD# BQ-000498

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

	Page No.: 3-5 Site Visit Date: 🟒	2/15/03
Address: 603 W. 10th St.	Structure Description	on: A ApiHISTS - to elle
Occupant: Anne Pescatore		e Number: <u>293-5839</u>
Owner (if different than occupant):	N/A Phone	e Number: <u> ^/A</u>
Business Name: N/A_	<u> </u>	
Sampling Team: PARANA	·	<u> </u>
Field Form Check Completed by (100% of	of forms): W 39	
	// //	
Data item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders)	ate Removal Completed: 7/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	Hound Chimney
	Crawl Space (Basement ) Sub-floor	Around Chimney in basement
	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	-
Eboard of Vermicance remaining mode.		
	Crawl Space Basement Sub-floor	
<u> </u>	None Other:	
Interior cleaning conducted during removal	Yes No	
	If Yes, which floors:	
	Basemen) Ground Second	
Was carpet removed during removal activities?	Yes No NA	4 .
Location of vermiculite removed outdoors	Driveway Flowerbed) Garden	Around-frees
<u>-</u>	Stockpile (Yard) None	11/100/10/11-5
<u> </u>	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
-	Stockpile Yard None	
	Other:	. }
	l	<b></b>

Data Item	Value	Notes		
Pre-Sampling Interview (To be completed with resident)				
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months			
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week Twice a month Once a month Less than once a month Other:	Two time since sherecieved the vucuum		
Heating Source (	Wood/Coal Electric Propane/Gas Other:	Word in basement Electric on scound floor		
Heat-Distribution -	Forced air Radiant - Other:	Busebourd Wall mount Radination basement		
How soon after the removal was a forced (air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months			
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:		
Addresses of other homes or properties where the occupants visit and may contain vermiculite	No	To be completed by field personnel:  Do these properties currently have indoor or outdoor vermiculite?		
Addresses or names of business where occupants work	Retired	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?		
	<u></u>			
ADDITIONAL INFORMATION		<del></del>		

Sheet No.: PA-\_\_\_000028

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

Field Logbook No: _	700307 Page No:			12102
	W. 10+4 St	Owner/Tenant:A	<u>e. i</u>	éscutore
Jusiness Name: /		<del></del>		,
Land Use Residen		~ · ]	Oth	ner ( )
Sampling ream: MA	CTEC CDM Other	Names: <u>/ /                                  </u>		- E de desa
Person Sampled:	NIVE FRECATORE SINNS	SYAG TASK. FOST CIE	andy	O EVENUE / TOIL
Data Item	13/2/15/03 Cassette 1	Cassette 2		Cassette 3
Index ID	CE- 00010			7
Location (D	BD-000490			
Sample Group	House		<u> </u>	
Location Description	Shoulder			. /
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS/FB-(field blank) LB-(lot blank)	F\$ F	B-(field blank) LB-(lot blank)
Matrix Type (circle)	(Indoor Outdoor	Indoor Outdoor	Indoo	r Outdoor
Filter Diameter (circle) (	25mm 37mm	25mm /37mm	25mm	37mm
re Size (circle)	TEM45 PCM- 0.8	TEM- AS PAZW 5/03	TEM-	.45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Notometer DryCal NA	Rotom	nete DryCal NA
Pump ID Number	626514	666023	<u> </u>	
Flow Meter ID No.	92045-1	92045-1		
Start Date	12/15/03	12/15/03		
Start Time	0831	1243	<u> </u>	
Start Flow (L/min)	3.11	3.11		
Stop Date	12/5/03	12/5/03		
Stop Time	1213	1831		
Stop Flow (L/min)	3.11	2.91		
Pump fault? (circle)	No (Yes) NA	No Yes NA	No	Yes NA
MET Station onsite?	(No Yes NA	(No) Yes NA	No	Yes NA -
Sample Type	TWA EXC NA	TWA EXC (NA)	TWA	EXCNA
Field Comments	222 on connter	348min x 3.01 L/min		Jb
O-11-11-11-11-11-11-11-11-11-11-11-11-11	222min x 3.11 Llmin	=10472		12/15/03
Cassette Lot Number:	2690L	Anne Company (1964)		
∠C (Field Team) ₹	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Volpe:	Blank (circle): Yes No
Entered (LFO) W	Entered Validated	Entered Validated	Entered	d Validated
1				

			_
For Field Team Completion	•		
Provide Initials)	Completed by	QC by	

Sheet No.: SA-

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR				
Field Logbook No:	Field Logbook No: 100304 Page No: 2-6 Sampling Date: 12/15/03  Peress: 603 W 10 <sup>th</sup> St. Owner/Tenant: April 12/15/03			
		Owner/Tenant: ANNC	Trscature	
Land Use: Residen		ial Mining Roadway	Other ( )	
	CTEC CDM) Other		Other ( , )	
Carriping room. to	10 12115103			
Data Item	Cassette 1	Cassette 2	Cassette 3	
Index ID	CE- 00011			
Location ID	BD-000490			
Sample Group	House			
Location Description	Living Room	·		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	
Matrix Type (circle)	(Indoor) - Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA	
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm	
Pore Size (circle)	TEM- :45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8	
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal /NA	Rotometer DryCal NA	
Pump ID Number	2133			
Flow Meter ID No.	92045-1			
Start Date	12/15/03		-	
Start Time	0845			
Start Flow (L/min)	4.09			
Stop Date	12/15/03			
Stop Time	1835	-		
Stop Flow (L/min)	4.09			
Pump fault? (circle)	No Yes NA	No Yes NA _	No Yes NA	
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA	
Sample Type	Pre Post Clear	Pre Post Clear	Pre Post Clear	
Field Comments	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA) 590 min X 4-09 Umin	2 <sup>nd</sup> Clear 3 <sup>fd</sup> Clear NA	2 <sup>™</sup> Clear 3 <sup>®</sup> Clear NA	
Tield Comments	= 24/3L		-//12/16/03	
Cassette Lot Number:	" " " " "		, ,,	
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	
ac (Field Team) 12	Volpe:	Volpe:	Volpe:	
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated	
√ For	r Field Team Completion			

(Provide Initials)

Sheet No.: SA- 000157

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100364 Page No: 3-5 Sampling Date: 12/15/6

Aress: 603 W. 1046 54. Owner/Tenant: ANNE Precedure Page No: <u>3-5</u> Sampling Date: /2//5/03 Sasiness Name: \_ 🐼 / 🐴 ... Land Use: Residential School Commercial Mining Roadway Other ( ) Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA DA115103 Data Item Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00012 Location ID BD-000490 Sample Group Busement **Location Description** Category (circle) FS F8-(field blank) L8-(lot blank) FS F8-(field blank) L8-(tot blank) FB-(field blank) LB-(lot blank) Matrix Type (circle) (Indoor) Outdoor Indoor **I**ndoor Outdoor ... NA Outdoor 25mm 25mm Filter Diameter (circle) 37mm 25mm 37mm 37mm Pore Size (circle) (FCM-0.8) TEM- .45 TEM- .45 TEM- .45 PCM- 0.8 PCM- 0.8 Rotometer DryCal w Meter Type (circle) NA Rotometer DryCal Rotometer DryCal NA Pump ID Number 92045-1 Flow Meter ID No. Start Date 12/15/03 0849 Start Time -Start Flow (L/min) 12/15/03 Stop Date 1840 Stop Time 4.09 Stop Flow (L/min) NA NA Pump fault? (circle) \_Yes NA No res No Yes No MET Station onsite? NA Nο Yes NA No Yes NA Post Pre " Post Clear Pre Post Clear Sample Type Pre Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA 2<sup>nd</sup> Cleaf 3<sup>rd</sup> Clear NA -2<sup>nd</sup> Clear / St Clear 591min x 4.09 /min Field Comments =2417L Cassette Lot Number:

<del> </del>	<del></del>		
For Field Team Completion	Completed by	QC by	
Provide Initials)	Completed by		į

Volpe:

Entered

Archive Blank (circle): Yes

Validated

Archive Blank (circle): Yes

Validated

Volpe:

Entered

Archive Blank (circle): Yes

Validated

Volpe:

Entered

ে(Field Team) <sup>হৈ</sup>

Entered (LFO) \_\_\_\_\_\_

Sheet No.: PA-\_\_000037

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR			
Field Logbook No: 10304 Page No: 19 Sampling Date: 12/16/03  ress: 603 W. 10 <sup>th</sup> St. Owner/Tenant: 4nnc rescatore			
Business Name:	W. 10" 37.	Owner/Tenant: 4NAC	Tescatore
Land Use: Residen		rcial Mining Roadway	Other ( )
Sampling Team: MA	CTEC COM Other	Nomes: DADMACH	•
Person Sampled: A	NNE PESCUTORE SNA	I: Task: Post Cla	can up Evaluation
Data Item	0/2/16/03 Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00017		
Location ID	BD-000490		
Sample Group	House		_
Location Description	BD-000490 House Shoulder		
Category (circle)	FS FB-(field blank) LB-(tot blank	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) L8-(lot blank)
Matrix Type (circle)	(Indoor Outdoor	Indoor Outdoor	Indoor Outdoor
Eilter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
re Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	666023	666348	·
Flow Meter ID No.	92045-1	92045-1	
Start Date	12/16/03	12/16/03	
Start Time	0835 1141	1447	
Start Flow (L/min)	3.11 3.11	3.11	
Stop Date	12/16/03	12/16/03	
Stap Time	1140 1445	1904	
Stop Flow (Umin)	2.91 3.11	3.11	
Pump fault? (circle)	(Ng) Yes NA	(No) Yes NA	No Yes NA
MET Station onsite?	(No) Yes NA	No Yes NA	No. Yes - NA
Sample Type	TWA EXC NA	TWA EXC (NA)	TWA EXC NA
Field Comments			-
Cassette Lot Number:	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO) 10	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	÷	Completed by	QC by
(Provide Initials)		Completed by	uo oj

Sheet No.: SA-\_ 000153

#### LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100304 Page No: 1-9 Sampling Date: 12/16/03 dress: 603 W. 10th 5t. Owner/Tenant: Anne rescutore business Name: W/A Land Use: Residential School Commercial Mining Roadway Other ( ) Sampling Team: MACTEC (CDM) Other \_\_\_\_\_ Names: PARANA MAIN 5 Cassette 1 Data Item Cassette 2 Cassette 3 Index ID CE- 00018 Location ID BD-000490 Sample Group Location Description Category (circle) FS FB-(field blank) L8-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) · Outdoor Matrix Type (circle) Indoor ) Indoor Outdoor Indoor Outdoor Filter Diameter (circle) 25mm) 37mm 25mm 37mm 25mm 37mm Pore Size (circle) PCM- 0.8 TEM- .45 TEM-.45 PCM- 0.8 TEM- .45 PCM- 0.8 Rotometer w Meter Type (circle) 'DryCal NA Rotometer DryCal NA Rotometer DryCal NA Pump ID Number 92045-1 Flow Meter ID No. . . 12/16/03 Start Date 0838 Start Time 4.09 Start Flow (Umin) 12/16/03 Stop Date 1906 Stop Time Stop Flow (L/min) **3.70** Pump fault? (circle) Nd Yes NA NA NA No Yes No Yes NA MET Station onsite? No Yes NA No Yes NA No Yes Sample Type -Pre Clear Post Pre Post Pre **Post** Clear Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear -- NA 2<sup>nd</sup> Clear 3<sup>nd</sup> Clear Field Comments Cassette Lot Number: Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes No C (Field Team) 12 Volpe: Volpe: Volpe: Validated Entered (LFO) Entered Validated Entered Validated Entered

For Field Team Completion	Completed by	.00 6
(Provide Initials)	Completed by	QC by

Sheet No.: SA- 000154

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Page No: 1-9 Sampling Date: 12/16/63 Field Logbook No: /00304 Owner/Tenant: Anne Pescatoce dress: 603 W. 10th St usiness Name:\_\_\_N/# Land Use: (Residential) School Commercial Mining Roadway Other ( Sampling Team: MACTEC (CDM) Other \_\_\_\_ Names: \_PARANA Data Item Cassette 1 Cassette 2 Cassette 3 CE- 00019 Index ID Location ID BP-000490 House Sample Group Basement Location Description Category (circle) FS FB-(field blank) LB-(lot blank) FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) Indoor Outdoor ÑΑ Matrix Type (circle) NA Indoor Outdoor NA indoor Outdoor 25mm 37mm 37mm 25mm 25mm Filter Diameter (circle) 37mm Pore Size (circle) PCM- 0.8 TEM- .45 TEM- .45 PCM- 0.8 TEM- .45 PCM-0.8 Rotometer DryCal w Meter Type (circle) NA DryCal Rotometer DryCal NA Rotometer NA Pump ID Number 2135 92045-1 Flow Meter ID No. 12/16/03 Start Date 0940 Start Time 4.09 Start Flow (L/min) 12/16/03 Stop Date Stop Time 1908 4.09 Stop Flow (L/min) No) Pump fault? (circle) Yes NA NA -No Yes No Yes MET Station onsite? No Yes No Yes NA No NA NA Yes Sample Type Pre Post Clear Pre Post Clear Pre Post Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear Field Comments Cassette Lot Number: Archive Blank (circle): Yes No Archive Blank (circle): Yes No. Archive Blank (circle): Yes C (Field Team) 1 Volpe: Volpe: Volpe: Entered (LFO) Validated Validated Entered Validated Entered Entered

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	QC by

Sheet No.: D- 000085

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Field Logbook No: _/	00304 Page No: ソ・70*からり	7-9 Sampling Da	te: /2//6/03
		Owner/Tenant: MANC	Procetore
Business Name:  Land Use: Residentia  Sampling Team: MAC		<u>.                                    </u>	Other ( )
Data Item	1/2/16/03 Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00020		
Location ID	BD-000490		
Sample Group (circle) (Subgroup of the property)	Garage, House Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other
Location Description (circle) ({-stailed description point within the location)	Basement, round Floo, Second Level Other	Basement, Ground Floor, Second Level Other	Basement, Ground Floor, Second Level Other
Matrix Type (circle)	Horizental Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 400	100 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	FEM- 48 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Ory-Cal NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	B1610 5-1521- 612	729 16 1-15-04	
Flow Meter ID No.	-1012729 BIG109		
Start Time	1451 1454 1459	1503	
Start Flow (L/min)	2.0 2.0 2.0	2.0	
Stop Time /452	1456 1501	1505	
Stop Flow (L/min)	2.0 2.0 2.0	2.0	-
Pump Fault? (circle)	No Yes	No Yes	No Yes
Field Comments	100 cm². Ground floor on floor entrag	100 cm² b seme~t-top	100 cm²
Cassette Lot Number:	100 cm²-Ground floor	100 cm <sup>2</sup>	100 cm²
23407	100 cm²-Basement on floor (base of steps	100 cm <sup>2</sup>	100 cm <sup>2</sup>
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	ac by

Sheet No.: PA-

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR			
Field Logbook No: 100304 Page No: 16-12 Sampling Date: 12/17/03  Press: 603 W. 10+4 St. Owner/Tenant: Pscefuce			
		Owner/Tenant: Fasce	tuce
Business Name:	tial School Commerc	ial Mining Roadway	Other ( )
Sampling Team: MA	CTEC CDM Other	Names: PARAN	A
Person Sampled: A	werescatore SNN:	NA Task: Rof. Cle	an Up Evaluation
Data Item	(VIA)17/0 Bassette 1	Cassette 2	Cassette 3
Index ID	_	·	<u> </u>
	CE- 00021		
Location ID	BD-000490		
Sample Group	House		
Location Description	Shoulder		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field plank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor	Indoor Outdoor	Indoor Outdoor
Filter Diameter (circle)	25mm 37mm	25mm /37mm /7/03	25mm / 37mm .
re Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 / PCM- 0.8
Flow Meter Type (circle)	Otometel DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	666348	666248	
Flow Meter ID No.	92045-1	92045-1	
Start Date	12/17/03	12/17/03	
Start Time	0836	1451	
Start Flow (L/min)	3.//	3.11	
Stop Date	12/17/03	12/17/03.	
Stop Time	1450	1480 /850	
Stop Flow (L/min)	3.11	3.11	
Pump fault? (circle)	No Yes NA	Rg Yes NA	No Yes NA
MET Station onsite?	No Yes NA	(No) Yes NA	No Yes NA
Sample Type	TWA EXC NA	TWA EXC (A)	TVVA EXC NA
Field Comments		-	In / 12/17/20
Cassette Lot Number:	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
			<u> </u>

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	ac by

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100304 Page No: 10-12 Sampling Date: 12/17/03 bress: 603 W. 10th St. Owner/Tenant: Percetore business Name: N/A Land Use: Residentia School Commercial Other ( Mining Roadway Sampling Team: MACTEC CDM Other \_\_\_\_\_ Names: PARANA Data Item Cassette 2 Cassette 3 Index ID CE- 00022 Location ID BD-060490 Sample Group Location Description Busement Category (circle) FS FB-(field blank) LB-(lot blank) ♣B-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank Indo Matrix Type (circle) Outdoor -Outdoor Indoor Indoor Outdoor (25mm) 25mm 37mm Filter Diameter (circle) 37mm 25mm 37mm (ECM- D) Pore Size (circle) TEM- .45 TEM- .45 PCM- 0.4 TEM- .451 PCM- 0.8 Rotomeler DryCall. Rotometer DryCa DryCal ow Meter Type (circle) Rotometer 2135 Pumo ID Number 92045-1 Flow Meter ID No. 12/17/03 Start Date 0843 Start Time 4.89 Start Flow (L/min) 12/17/03 Stop Date Stop Time 4.09 Stop Flow (L/min) ักอ์วิเ NA Pump fault? (circle) Yes NA Yes NA No Nο Yes MET Station onsite? No Yes NA Nο Yes NA No Yes NA Pre Post\* Clear Post Clear Pre Post Clear-Sample Type Pre 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NA Field Comments 12/17/03 Cassette Lot Number: Archive Blank (circle): Yes Archive Blank (circle): Yes No. Archive Blank (circle): Yes JC (Field Team) Volpe: Volpe: Volpe: Entered (LFO) Entered Validated Entered Validated Entered Validated\_

For Field Team Completion	Completed by	OC by	
(Provide Initials)	Completed by	QC by	-

Sheet No.: SA- 000155

## LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: _/		10-12 Sampling D	Date: /2/17/03	
dress:		Owner/Tenant: Pesca	tore	
	~/A			
Land Use: Residen	tial School Commerc		Other ( )	
Sampling Team: MA	CTEC CDM Other	Names: <u>PARANA</u>		
Data Item	/ <i>P/11ጣ(ቀን</i> Cassette 1	Cassette 2	Cassette 3	
Index ID				
]	CE- 00023			
Location ID	30-000490			
Sample Group	House			
Location Description	LIVING ROOM	:		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) ŁB-(lot blank)	FS FB-(field blank) LB-(lot blank)	
Matrix Type (circle)	ndoor -Outdoor - NA	Indoor Outdoor NA	Indoor Outdoor NA	
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm	
Pore Size (circle)	TEM- 45 CM-08	TEM45 PCM- 0.8	TEM45 PCM- 0.8	
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA	
Pump ID Number	2/33	,		
Flow Meter ID No.	92045-1			
Start Date	12/17/03			
Start Time	0845		·	
Start Flow (Ł/min)	4.09			
Stop Date	-/2/17/03			
Stop Time	1855			
Stop Flow (L/min)	4.09			
Pump fault? (circle)	№ Yes NA	No Yes NA	Ng Yes NA	
MET Station onsite?	(No) Yes NA	No Yes NA	No Yes NA	
Sample Type	Pre Post Clear	Pre - Post Clear	Pre Post Clear	
	2 <sup>nd</sup> Clear 3 <sup>nd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>nd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	
Field Comments				
Cassette Lot Number:			12/17/00	
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	
ac (Field Team)	Volpe:	Volpe:	Volpe:	
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated	

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	QC by

### Residential Activity Log

Resident Address: 607 603 W 10th 5t.	
Volunteer Name: Anne Pescatore	
Sampling Date(s): 12/15/03	
Personal air sample number (s): <u>CE-00010</u>	<u>.                                    </u>
FSDS number(s): PA-000028, SA-000151, SA-00013	<u>کے ک</u>

Date/Time	Go Outside?	Pump problem?	General Activities	}
Interval	} _			}
8:30 - 11:30 4	Yes ( mins) Describe	No Yes (describe)	dhise work	
1:30-1:00		No (res idescribe)	various charas	J
1, 30 ~6; 	No Yes ( mins) Describe	Rump fuult No Yes (describe)		
	No Yes ( mins) Describe	No Yes (describe)		
		:	_	-
	No Yes ( mins) Describe	No Yes (describe)	-	
	No Yes ( mins) Describe	No Yes (describe)	· · · · · · · · · · · · · · · · · ·	
		- I	-	

Note: Continue on second page if necessary.

) 15 293-1759

### Residential Activity Log

Resident Address: 603 W. 10th St.	
Volunteer Name: Anne Pescatore	
Sampling Date(s): 12(16/03	
Personal air sample number (s):	
FSDS number(s): <u>D-000085., PA-000037. 5A-000153, 154,</u> 13	22

Date/Time Interval	Go Outside?	Pump problem?	General Activities
9:00 -	No Yes ( mins) Describe	No Yes (describe)	Cleaned Helshan
11:00-1:3	No Yes ( mins) Describe	No Yes (describe)	Denning, etc.
1 9,30	No Yes ( mins) Describe	No Yes (describe)	addressed X of as
3:00 - 7:	Yes ( mins) Describe	No Yes (describe)	rided TVV
	No Yes ( mins) Describe	No Yes (describe)	-
	No Yes (mins) Describe	No Yes (describe)	

Note: Continue on second page if necessary.

Grez 293·1759

### Residential Activity Log

Resident Address:	E0/11/21/03	<i>7</i>	102 11	10546
Resident Address:	TANC	escatore	603 W	<u>. 10 -</u> 237
Volunteer Name:	Anne	Pescatore	ı	
Sampling Date(s):	12/17/0	3		·
Personal air sample nu	mber (s): <u>C</u> E	-00021		·
FSDS number(s): PA	-00003	8 < A - 000 /	55 165	

Detection	Go Outside?	Duran nashbasa	Canadal Antidatan
Date/Time Interval	Go Outside?	Pump problem?	General Activities
IIIGIVAI	No	No	Heise with
ai.	Yes ( mins)	Yes (describe)	exerge
9:00	Describe	(100 (1000)	i
11,00			
1 / 412		_	
	No		
11:00 -	No Yes ( mins)	.No Yes (describe)	× mes Cacolo
121.30	Describe	1 es (describe)	Marions !
1 74,00			
	No	l Na	
12:30	No Yes ( mins)	No   Yes (describe)	・・・ブン
12:30	Describe	/ es (describe)	rested -TV
' ' •			
	ŧ		
<del></del>	N.	1	
	No Yes ( mins)	No Yes (describe)	Various theres
1:30 -	Describe	1 55 (2555.155)	7, 7
1:30 -		_	O isilar
2,50-		_	<del></del>
}- <u></u> -	No No	No	
2:30	Yes ( mins)	Yes (describe)	mise Choses
- ·	Describe	. 55 (5550),567	11000
4:00			1 7 K - [
		] ]	
· · · · · · · · · · · · · · · · · · ·	No	No	<u> </u>
7:00-	Yes ( mins)	Yes (describe)	·
` <b>.,</b> , _	Describe	(	$\mathcal{T}\mathcal{V}$
7:00		- <i>-</i>	' '
		<u> </u>	

Note: Continue on second page if necessary.

Pescatore 603 W. 10th St. Post Evaluation Wenther 240F Clear Activity: Personal, um pialislos stationary and dust sampling will be conducted a cos W. 10th St. Sampling will be conducted IAW SAD Addendum, Post Clean Up evaluation Sampling 12/1/03. Equipment 4 high volume sampling pumps, 4 low volume sampling. pumps, 4 Cassette stands, Rotometer 92045-1, O. 8 um PCM casse Hes, 0.45 M dust sampling cusselles, tyson, decon wipes, Dry Cal B1610/5 1521, screwdower, flushlight, sample pump pouch. 0825 Ousite. CE-00010 placed on pump 626514 and pre-calibrated. Sample placed ON Anne Pescature. 0831 CE-00010 started. CE-00011 placed on pump 2133 and pre-calibrated. 0845 CE-00011 (Living Room) started. CE-00012 pluced on pump 2135 and she had 1012/15/03 pre-calibrates

A Psicatore Post Clean-Up Evaluation 3 W. 10th St. 12/15/03 0849 CE-00012 (Busement) started. 1130 Onsite. CE-00010 Flow Ck-OK. CE-00012, 11 Flow Ck. - OK. 1150 Offs.te. 1230 Anne Rescuture contacted me and said here pump stopped. 1240 Onsite. CE-00010 stopped due to flow foult. Anticipated funlt happened while volunteer supped. CE-00010 placed on pump 666023 and calibrated - (6) 1243 CE-00010 sturted. 222 minutes on counter of pump 626514. This number will be used to calculate fault time/stoptime. 1300 (5) 1250 Offsite. E-00010 flow Ck-OK. CE-00011,12 flow ck-OK. All filters turning brown due to ciggerate smoke. 1620 Offsite. Anne Requested pump be removed at this time. 11/2/15/03

Cescatore Post Cleanup Evaluation 603 W. 10th St. Grand Parent 12/15/ 1822 PIF questionerse completed 1831 CE-00010 stopped-postculibrois and scaled in sample bas. 1835 CE-00011 stopped post calibrated and scaled in sample 695. 1840 CE-00012 stopped postculibrated and scaled in sample bas. Equipment decontaminated. Residential activity los recieved . from volunteer. 1855 Offsite to CDM Office. Ket FSDS PA-000028-54-000151,52 Samples locked in sample storage @38 Louisians Hie. 12/15/03

6 Rescutore- Post Clean Up Evaluation 12/16/03 Pexatore - Post Clean Up Evaluation 12/16/03 603 W. 10th St. Gregory Parana COM PM 03 W. 10th St. Gregory Parena CAMPATE 0700 Onsite CDM Office. Hetivity: Day 2 of stationary air, samples to Crowell (CE-00010,11,12) personal air sampling @ BD-600000 Dust sample will a sobe collected Sampling will be conducted IAW 5APAddendum, PCE Sumpling 12/1/03. Reference ps. 3 for equip. Tist. 0830 Onsite. CE-bool7 attached to pump st paris/03 666023 and pre-calibrated with rotometer 92045-1. Sample placed on Ar. 0835 CE-00017 started. CE-00018 (Living Room) placed on pump 2133 and pre-celibrated 0838 CE-00018 started. CE-00019 placed on pump 2135 and pic-calibrated - 0 0840 CE-00019 (Basement) started. 0850 Residential activity los given to the resident. Offsite to COM office -1130 Onsite. Al present. ----1140 CE-00017 stopped and culibrated 1141 CE-00017 started. Filter darkers due to ageratte smok.

8 Pescutore - Post Clean Up Evaluation 12/14/03 3 W. 10+4 St - Gregory Perana Lype COM 1145 CE-00018 flow ck-OK. Filter darkened from eighretlesmoke 1150 CE-00019 flow ck-OK. Filter darkened from eigarette smoke. 1440 Onsite. 1445 CE-00017 stopped and postcalibrated CE-00017 placedon pump 666348 and calibrated. 1447 CE-00017 placed on APand started. Lute entry 0800 Pump 612729 calibrated to primary flow B1610, 51521 with microvacassettein line (Lot#23802). 1505 CE-00020 (dust) collected. 1510 CE-00018 Flow ck-OK. Filter darkened due to cis. smoke. 1517 CE-00019 Flow ck-OK. Filter darkened due to cis smoke and moved burning stove in businest 1700 ONSITE- Flow CK-OK Cal CK-OK. All tilters loaded with smoke. 1900 Owsite. 1904 CE-00017 stopped post calibrated and scaled in bas. 12/14/03

Pescatore - PCE Sampling 12/16/03 9
603 W. 10th St. Gregory Farana /2/2 1906 CE-00018 stopped, postcalibrate and scaled in sample bas .. 1908 CE-00019 stopped, pot calibrated and seeled in sample bas Ref FSDS D-000085, PA-000037 5A-000153,154. Recieved completed residential activity log from resident. 1915 Offsite. to 2293 KRR. 2000 Samples placed insample Storage @ 318 Louisiana Ave. 12/1.6/03

Anthur Gregory Parana Com Inter Activity: Day 3 of the PCE- Personal and stationary or samples will be collected in BA- 600490. Sumpling will be conducted IAW SAP Addendum, CSS, PCE Sampling 12/1/03. Egupment Anne Pescatore indicated that she did not build a fire in the basement today. 0830 Onsite. CE-00021 placed on pump SE \$12/17/03 666348 and pre-culibrated with rotumeter 12045-1. Sample placed on AP. - B placed on AP. 0836 CE-00021 started. Anne smoking. CE-00022 (Basement) placed on pump 2135 and pre-calibrated. CE-00023 (LIVING ROUM) placed ON 0845 CF-00023 started. 1130 ONsite 1135 CE-00021 flowck-OK-Filter darkened from cig. smoke and wood smoke. 12/17/03

Pesculore 603 W. 16th St. - RE-EPA-Volpe Author: Gregory Parana Posts CDM AP indicated that she should askes from the woodstove in the basement stove. Trouble starting fire in the 1139 CE-00022 flowck-Ok (17)17/63 FilhrCK-Filter = 10% loaded slightly darkened -1142 CE-00023 How ck-OK Filter darkened from Cig. smoke. 1150 Offsita -1445 Owsite to replace low vol. pump and placed on pump 666248 and calibrated. 1451 (E-00021 placed on AP and started. CE-00023, 22- flowck-ok Eilter CK · OK . - 1 1100 Onsite - CE-00021,22,23 Flowck : OK Filter Ck-smoke 1850 Onsite. CE-00021 stopped postcalibrated and sealed. 12/17/03

Pescutore 60WW. 10th St. - PCE 12/17/63 1854 CE-00022 (Businent) stopped post-culibrated and sealed. 1855 CE-00023 stopped-post-calibrated and scaled. All guipment decontaminated. Residential Activity Los recieved from AP. Offsite to COM office. 1930 Samples locked in sample sturage. Out of losbook.

# 3796 Highway 2 S

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100304	Page No.: <u>/3 - / 4</u> Site Visit Date://	8/04
Address: 3796 Hwy 2	Structure Description:	House
Occupant: Elsie Flemm	Phone N	Number: 293-4480
Owner (if different than occupant):		Number:
Business Name: NAMA	<u>.</u>	<u> </u>
Sampling Team: PARANA		
Field Form Check Completed by (100% of	of forms):	9 <u>5</u>
		· · · · · · · · · · · · · · · · · · ·
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: 10/03
Location of vermiculite removed indoors (	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other:	•
		0 1 1111
Location of vermiculite remaining indoors	Attic Walls interior or exterior)	Bedroom Kitchen
·	Crawl Space Basement Sub-floor	
	None Other:	
Interior cleaning conducted during removal	Yes No	<del> </del>
-	If Yes, which floors:	
		-
- *	Basement Ground Second	
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA _	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	•
	Stockpile (Yard) None	
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
-	Stockpile Yard None	
_	Other:	

Data Item	Value	Notes
Pre-Sampling Interview (To be completed	d with resident)	· · · · · · · · · · · · · · · · · · ·
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	Gottherac 1/5/04 Has not used
-	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	17
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week  Twice a month Once a month  Less than once a month	The vac will be used furce a week
	Other: Twice a week -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Heating Source	Wood/Coal Electric Propane/Gas Other: Fuel Oil	
Heat Distribution	Other:	
How soon after the removal was a forced air heating source first used?	1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	No	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
Addresses or names of business where occupants work —	No	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
additional information - ASSOCIATION - ASSOC	iate with samples cE-o	0026, CE-00027,

#### Sheet No.: \$A- 0.00136 LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: 100304 Page No: 13-14 Sampling Date: 1/8/04 ress: 3796 Hwy 25. Owner/Tenant: Elsie Flemming Business Name: School Land Use: Residential Commercial Mining Roadway Other ( Sampling Team: MACTEC (CDM )Other Names: PARANA Data Item Cassette 1 Cassette 2 Cassette 3 Index ID CE- 00026 Location ID BD-003319 House Sample Group Location Description

LIVING ROOM Category (circle) FS) FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) FS FB-(field blank) LB-(lot blank) ndoor Matrix Type (circle) Outdoor NA Indoor Outdoor Outdoor Indoor NA 25mm) 37mm 25mm Filter Diameter (circle) 25mm 37mm 37mm Pore Size (circle) PCM- 0.8) TEM- .45 TEM- .45 TEM- .45 PCM- 0.8 PCM- 0.8 w Meter Type (circle) Rotometer DryCal Rotometer Rotometer DryCal NA DryCal NA Pump ID Number Flow Meter ID No. 92045-1 Start Date 0901 Start Time 9.01 Start Flow (L/min) Stop Date Stop Time 200 2015 Stop Flow (L/min) No\_ NA Pump fault? (circle) Yes No -NA No Yes NΑ Yes No MET Station onsite? Yes NA No Yes NA No Yes NA Post Sample Type Post Clear Pře Clear Pre Post Clear Pre 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear NĀ **Field Comments** Cassette Lot Number: Archive Blank (circle): Yes Archive Blank (circle): Yes Archive Blank (circle): Yes QC (Field Team) Volpe: Volpe: Volpe: Entered (LFO) Entered Validated Entered Validated Entered Validated

For Field Team Completion	Completed by	00 hr T/	
(Provide Initials)	Completed by	acty (C .	_

Sheet No.: D-  $\underline{\phantom{000086}}$ 

Field Logbook No:/	100304_ Page No: _/	3-/4 Sampling Da	te: 1/8/04
ress: <u>3796</u>	Hwy 2 5.	Owner/Tenant: _=/5/	e Flemming
Business Name:	NIA	·	3
Land Use: Residentia		,	Other ( )
Sampling Team: MAC	TEC (CDM) Other	Names: PARANA	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00027	CE- 00029	CE-00027 (continued)
Location ID	BD-003319	BD-003319	(continued)
Sample Group (circle) (Subgroup of the property)	Garage, House Shed, Pump House Other	Garage, House, Shed, Pump House Other	Garage, House, Shed, Pump House Other
Location Description (circle) (Detailed description point within	Basement, Ground Floor, Second Level Other	Basement, Ground Floor, Second Level Other	Basement, Ground Floor, Second Level Other
Matrix Type (circle)	Horizontal Surfaces  High Traffic Areas  Other	Horizontal Surfaces High Traffic Areas Other	Horizontal Surfaces High Traffic Areas Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS (FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	EM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Ory-Cal NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	666023	NA1	
Flow Meter ID No.	B1410 51521		
Start Time	1609 1613- 1615		1618
Start Flow (L/min)	2.0 2.0 2.0		2.0
Stop Time	1611 1615 1617	12	1620
Stop Flow (L/min)	2.0 2.0 2.0	2 1/8/04	2.0
Pump Fault? (circle)	No Yes	No Y0001/8/8 4	No Yes
Field Comments	-100 cm² - Living Room floor e frontentrane	100 cm²	100 cm2. Top of hot water tank in Buthroom
Cassette Lot Number:	100 cm²- Kitcher shelf of-South Wall 100 cm²-Floor of Bectroom adjacent Bathroom	100 cm <sup>2</sup>	100 cm <sup>2</sup>
Entered (LFO)	Archive Blank (circle): Yes No Volpe: Entered Validated	Archive Blank (circle): (Yés) (No   Entered Validated	Archive Blank (circle): Yes No Entered Validated
		<del> </del>	

<del></del>			
For Field Team Completion	Completed by	9/ <sub>12</sub>	QC by Z
(Provide Initials)	Completed by	<del>4</del>	

3796 Hwy 25. Author: Gregory turens PCE-ENALVOIPE IND COM. Activity: Stationary Air and dust sumpling will be completed: Inside of BD-003319. All sumpling will be conducted IAW SAP Addendum, CSS, PCE Sampling 12/1/03. Ejuipment Retpg. 3 of this Tosbook. 0850 Onsite. Rotometer 92045-1 will be used to calibrate air samples. Low volume sampling pump 666023 calibrated with dry.cal B1610 51521, CE-00026 pre-calibrated. 6901 CE-00026 started. Offsite. 1200 ONSITE CE-00026 Flow ck- Re-calibrated. Filter CK-OK. PIF completed for BD-003319 Offsite. 1605 Onsite. CE-00026 Flowik Filter Ck - OK. 1617 CE-00027 (Dust) Collected. CE-000 29 Blank exposed and scaled. OFFs.te . -118/84

118/04 2010 Onsite. 2015 CE-00026 stopped postculibrate and sealed. Equipment decontament of the site. Offsite to CDM officet Samples locked insample stolage @ 318 tours and Aug. Ref FSDS D-000086, SA-000186. 2030 Ont of logbook.

# 713 Michigan Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

	Page No.: 15-16 Site Visit Date:/	112/04
Address: 7/3 Michigan	9 v.C Structure Description:	House
Occupant: Beth Lee	Phone N	lumber: 223-478/
Owner (if different than occupant):	ANC Phone N	lumber: 54me
Business Name: N1	<b>}</b>	
Sampling Team: PARANA		
Field Form Check Completed by (100% of	of forms): W 05	
		·
Data item	Value	. Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	Removal Completed: 503
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	-
}	Other:	
Location of vermiculite remaining indoors	Aftic Wallstigteriot (2/0	4
	Crawl Space Basement Sub-floor	•
	None Other:	
Interior cleaning conducted during removal	Yes No	<del></del>
1	If Yes, which floors:	
	Basement Ground Second	•
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	•
·	Stockpile Yard None	
	Other:	
		· · · · · · · · · · · · · · · · · · ·
Location of vermiculite remaining outdoors		•
·	Stockpile Yard None	
	Other:	

Data Item	Value	Notes
Pre-Sampling Interview (To be completed	d with resident)	·
Has EPA provided a HEPA vacuum and has it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	Provided same day as sample Resident did Not have the chances vacuum bouse
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month Once a month Less than once a month Other:	4
Heating Source	Wood/Coal Electric Propane/Gas Other:	10.
Heat Distribution	Forced air Radiant Other:	-
How soon after the removal was a forced air heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	None	To be completed by field personnel:  Do these properties currently have indoor or outdoor vermiculite?  —
Addresses or names of business where occupants work	Senior citizen house Keeping - confidential	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
ADDITIONAL INFORMATION	<u>.                                    </u>	<del> </del>

000207

Sheet No.: SA

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR			
Field Logbook No:	/00304 Page No: _	Sampling D	late: 1//2/04
ress: 11.3 //	Mis an Are	Owner/Tenant: Reth	766
Land Use: (Residen		cial Mining Roadway	Other ( )
Sampling Team: MA		Names: PARANA	
Data Item	161/12/8 Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00030	CE- 00031	
Location ID	BP-000263	BD-000263	
Sample Group	House	House	
Location Description .	Kitchen	2ndlevel East Room	
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot.blank)
Matrix Type (circle)	Indoor NA	Indoo -Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM-:45 PCM-0.8	TEM45 PCM- 0.8
w Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0689	0891-A	
Flow Meter ID No.	92045-1	92045-1	
Start Date	1/12/04	1/12/04	
Start Time	0822	0827	
Start Flow (L/min)	9.01	9.01	
Stop Date	1/12/04	1/12/04	
ا ور عرب Stop Time	8742 1942	B746 1946	
Stop Flow (L/min)	9.01	9.01	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Typ <u>e</u> .	Pre Post Clear	Pre Post Clear	Pre Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA -	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	· -		-
Cassette Lot Number:			
(Field Team)	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
7-1			

Completed by

QC by

For Field Team Completion

(Provide Initials)

Sheet No.: D-  $\underline{-00009}8$ 

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

		Sampling Da	
ress: <u>7/.3 /1/.</u> 0	higani Ave	Owner/Tenant: <u>Refh</u>	Lee
	N/A		· · · · · · · · · · · · · · · · · · ·
Land Use: Residentia	School Commercia	I Mining Roadway	Other ( )
	TEC CDM Other	Names: PARANA	
	16 (1010)	<del></del>	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00034		
Location ID	BD-000263		
Sample Group (circle) .	Garage, House, Shed,	Garage, House, Shed,	Garage, House, Shed,
(Subgroup of the property)	Pump House	Pump House	Pump House /
	Other	Other	Other
Location Description	Basement Ground Floor,	Basement, Ground Floor,	Basement, Ground Floor,
(circle)	Second Leve	Second Level	Second Level
(Detailed description point within the location)	Other	Other	Other
	Horizontal Surfaces	Horizontal Surfaces	Horizontal Surfaces
Matrix Type (circle)	High Traffic Areas	High Traffic Areas	High Traffic Areas
	Other	Other	Other
tegory (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	BINE 666389		
Flow Meter ID No.	B1610   51521		
Start Time 1432	1438 1441 1445	1448	
Start Flow (L/min) 72 2/3)	2.0 2.0 2.0	2.0	/
Stop Time	1440 1443 1447	14.50	
Stop Flow (L/min)	2.0 2.0 2.0	2.0	
Pump Fault? (circle) (	No Yes	No Yes	No Yes
Field Comments	Grand floor	2nd level floor	\ 2
, in a continuo	100 cm <sup>2</sup> on care ting near front entrance	400 cm2 center of east	100 cm <sup>2</sup>
		Room	
Cassette Lot Number:	100 cm² Ground floor	100 cm²	100 cm² ///2/04
23767	windowsill	· -	11/2/04
<u>~ / / / / /                             </u>	100 cm² 2 md level floor	100 cm <sup>2</sup>	100 cm <sup>2</sup>
_	at top of steps		
	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
antered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated

For Field Team Completion	Completed by	QC by
(Provide Initials)	Completed by	QC by

7/3 Michigan Ave Beth Lee PCE-EPA-Volpe Author: Gresory Peruna Jose Activity: Station air and dust samples will be collected as part of the post cleanup evaluation. Sampling will be conducted in level DPPE IAW SAP Addindum, CSS, PCE Sumpling 12/1/03. Equipment: Retus 3 of this losbook. 08/5 Onsite. Sampling pumps plussed in towarm up. Rotometer 92045-1 used to pre-calibrate all samples. CE-00030 pre-calibrates 0822 CE-00030 Started (Kitchen) CE-00031 pre-calibrated. 0827 CE-0003 i started (2nd kvel) Offsite to 1212 Louisiana. 1115 Onsite. CE-00030, 31 flow ck-OK Fifer Ck-OK. - @ 1400 Owsite. HEPA vacorientation conducted with Beth Lee. HEPA vac 5/N 0315,000827 given to resident. CE-00030,31 Flow Clc. Pump Ck OK.

713 Michigan Ave - Lee. Author: Koth Gregory Parana Late Entry: Amp 666389 calibrated with dry-cal B1610/51521. PIFlomplet. 1450 CE-00034 collected. Deviation to SAP noted. Sample collected from 3 high frattic areas and one horizontal surface on 1st and 2nd level of home. Offsite 1700 busite. Pump Ck. OK Flow Ck-OK. 1942 CE-00030 stopped, post calibrated and scaled. 1846 CE-00031 stopped, postcalibrated and sculed. All gupment decontaminated. RefFSDS 5A-000207, D-000098 and PIF BOH 000263. Offsite to CDM office. Samples locked in sample storage. 2030 Off 1/12/04 Out of logbook. HEPA vac uptused before Sampliny \$ 1/12/04

## 505 Louisiana Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

	Page No. <u>/7 - /8</u> Site Visit Date:/	13/04
Address: 505 Louis (ana	Avc. Structure Description	Peter House
Occupant: Perez	Phone	Number: <u>293 · 7344</u>
Owner (if different than occupant):5	Phone	Number: Samt
Business Name: W/A		
Sampling Team: PARANA - CL	om ·	
Field Form Check Completed by (100% of	of forms): 45	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Dat	e Removal Completed: 3/0.3
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	Attic Above Foyer
	Crawl Space Basement Sub-floor	
	Other:	
Location of vermiculite remaining indoors	·Attic Warsting Hospitaliport	NE Walls \$ 5/0/04
	Crawl Space Basement Sub-floor	
	None Other:	
Interior cleaning conducted during removal	Yes No	Scaled vermiculite insarase attic
	If Yes, which floors:	insarase affic
·	Basement Ground Second	implied
	Garage Attic Other:	· · · - · · - · · - · · · - · · · ·
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed-outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	
	Other:	,
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	_
	Stockpile Yard None	
· .	Other:	

Pre-Sampling Interview (To be completed Has EPA provided a HEPA vacuum and has it been used since removal?  How often do you vacuum with your EPA provided HEPA vacuum?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Once a week More than once a week	
has it been used since removal?  (  How often do you vacuum with your EPA	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately  1 to 2 months  3 to 4 months  5 to 6 months  more than 6 months	
	3 to 4 months 5 to 6 months more than 6 months	
	more than 6 months	
	<del></del>	l
•	Twice a month  Once a month  Less than once a month	
	Other:	-
leating Source	Wood/Coal Electric Propane/Gas  Other:	
leat Distribution	Forced air Radiant Other:	
low soon after the removal was a forced ir heating source first used?	Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months	
lave any of the occupants been in contact with any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties here the occupants visit and may contain ermiculite	None	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where ccupants work	Lincoln County Public School Admistration Building	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?  No- Removal conclusion 2003
DDITIONAL INFORMATION		

Sheet No.: SA- 000214

Archive Blank (circle): Yes

Validated

Volce:

Entered

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR Field Logbook No: <u>/06304</u> Page No: <u>17-18</u> Sampling Date: <u>///3/64</u> bress: 505 Louisiana Ave. Owner/Tenant: Perez School Land Use Residential Commercial -Mining Roadway Other ( Sampling Team: MACTEC CDM Other \_\_\_\_ Names: PARANA <del>Ŋ//3/64</del>-161/13/04 Data Item Cassette 2 Cassette 1 Cassette 3 CE- 00040 Index ID CE- 00039 Location ID RD-002032 80-002032 Sample Group **Location Description** e tup of steps Kitchen Category (circle) (FS )FB-(field blank) LB-(lot blank) FS F8-(field blank) LB-(lot blank) FS FB-(figlid blank) LB-(lot blank) Indoor Outdoor Indoor NA Matrix Type (circle) Outdoor Indoor Outdoor 25mm 25mm Filter Diameter (circle) 37mm 37mm 25mm 37mm Pore Size (circle) PCM- 0.8 (PCM- 0.8) TEM- .45 TEM- .45 TEM- .45 PCM-0.8 ow Meter Type (circle) Rotometer DryCa! Rotometer DryCal Rolonseter DryCai 0891-A Pump ID Number 92045-1 Flow Meter ID No. 92045-1 1/13/04 1/13/04 Start Date 085d Start Time 0852 9.01 9.01 Start Flow (L/min) 1/13/04 1/13/04 Stop Date 2005 Stop Time 2010 9.01 9.01 Stop Flow (L/min) (ON Pump fault? (circle) . NA No Yes NA NA Yes Yes No No NA. MET Station onsite? Yes NA Yes NA Yes Sample Type Post Pre Post Post Clear Pre Clear Clear -2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA 2<sup>nd</sup> Clear 3<sup>rd</sup> Clear (NA) Çlear 3<sup>rd</sup> Clear Field Comments 1/3/05

For Field Team Completion	Completed by	QC by
(Provide Initiats)	Completed by	i de by

Volne:

Entered

Archive Blank (circle): Yes

Validated

Archive Blank (circle): Yes

Validated

Volpe:

Entered

Cassette Lot Number: **42415** 

C (Field Team)

Entered (LFO) 13

	_	11	15	1:	Ţ	1
Sheet No.:	D	v	•	0	-	_
/110Ct 140						

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

Fild Logbook No: 100364 Page No: 17-18 Sampling Date: 1/13/04  Press: 505 Louisiana Ave. Owner/Tenant: Persz										
Business Name:		<u> </u>	708.	_ Owner	7 renanti	Fere?				
Land Use: Residentia		hool	Commercia	l Min	ino [	Roadway	Other (	1		
Sampling Team: MAC		_			_	•	Outer (	,		
Camping Todai. Mixto			<u> </u>	_ 14011100.						
Data Item	pilist	Cassett	te 1	<u> </u>	Casset	te 2	(	Cassette 3		
1- 110	7		. <del>-</del>	T:						
Index ID	CF.	<u>.                                    </u>	1	ļ		7				
Location ID	30	0-002	032		<u> </u>					
Sample Group (circle)	Garage,	(House) S	hed,		House, S	Shed,	Garage, F	Garage, House, Shed,		
(Subgroup of the property)	Pump H			Pump Ho	i	•	1	Pump House		
	Other_			Other	+	<del></del>	Other	Other		
Location Description	Baseme	nt, Ground	Floor,	Basemer	nt, /Ground	d Floor,	Basement,	Ground Floor,		
(circle)	Second	Level		Second L	.eyel		Second Le	vel ∫.		
(Detailed description point within	Other_		<del></del>	Other	<del>/</del> -	· ·	Other			
the location)	Horizont	al Surfaces	· · · ·	Horizonta	Surfaces		Horizontal	Surfaces		
Matrix Type (circle)		ffic Areas		High Traffic Areas			High Traffic Areas			
	Other			Other			Other			
tegory (circle)	FS)FB-	(field blank)	LB-(lot blank)	FS FB	field blank)	LB-(lot blank)	FS FB-(fie	eld blank) LB-(lot b	ılank)	
Sample Area (cm²) (circle)	100	200 3	00 NA	100	200 3	300 NA	100 20	00 300 N	NA .	
Filter Diameter (circle)	25mm	37m	m	25mm	37m	nm	25mm	37mm		
Pore Size (circle)	TEM- 45	PCM	- 0.8	TEM45	P <u>C</u> N	<i>N-</i> 0.8	TEM45_	PCM- 0.8		
Flow Meter Type (circle)	Rotomete	er pry-l	Cal) NA	Rotomete	r Dry-	Cal NA	Rotometer	Ory-Cal N	NA	
Pump ID No.		1205			· H.					
Flow Meter ID No.	BI	1610/	5/52/	-	_/P1/	13/04		-		
Start Time	1416	1420	1426	1429		•		<u> </u>		
Start Flow (L/min)	2.0	2.0	2.0	2.0		_		<b>/</b>		
Stop Time	1418	1422	1428	1431		<u> </u>	· .	<u> </u>		
Stop Flow (L/min)	2.0	2.0	2.0	2.0		<u> </u>	<i> </i>	1		
Pump Fault? (circle) (	No)	Yes		No	Yes	_	No /	Yes		
Field Comments	100 cm <sup>2</sup>	broughd	level	100 cm²	gant le	vel top shelf	100 cm <sup>2</sup>			
	Land I	p~ T(60,	~ @ ~ (. t	100 6111	tbook	shelf.	100 CM		-	
	100 a=2.	Grown	1 level	100 cm²		-	100 0002	Jb 1131	00	
Cassette Lot Number: ~			dow will	100 Cm			100cm		٠,٠	
23802				4002		*	4002	_		
	100 cm² 2 nd level an		100 cm <sup>2</sup>		100 cm <sup>2</sup>		ļ			
	•		V = 1	Assistant Olevali (alternativa del		Austrian Olembria Maria Al		إا		
Entered (LFO)		nk (circle): tered		Archive Blank (circle): Yes No Entered Validated		Archive Blank (circle): Yes No Entered Validated				
Furdien (FLO)	voipe: ∈n	reied	, andaren	rureren —	valid	,areo	CINGLES	+ \$1104150	<del>-</del>	
<del></del>				<del></del>			<del></del>	· ·		

For Field Team Completion	Completed by	QC by			
(Provide Initials)	Completed by	GC by			

SOS Louisiana Ave. - Pèrez PCE-EPA/Volpe Author: Grosory Parana Ar And COM Stationary Air and Dust samples will be collected inside of BD:002032. Sampling will be conducted in level DPPE IAW. SAP Addendum, (55, PCE sampling 12/1/03 Equipment Ref Pr 3 of this lajbook. Retometer 92045-1 , will be used to calibrate air samples Dry Cal B1610 5 1521 used to calibrate low volume pump 612058 e comoffice prior to dust sumpling -0842 Onsite. Mr Perez present. CE-00039 pre-calibrated. 0850 CE-00039 (Kitchen) started. CE-00040 pre-calibrated. 0852 CE-00040 (2nd/evel) started Offsite. 1130 Onsite. PIF#BD-002032 completed. Flow CK-OK and Filter CK. OK. Offsite to 1545ki Rd.

SOS Louisiana Ave - Arcz 1113/04

APKE-EPALVOIPE

Anthor Gregory Parama Proposed

1405 Onsite.

1431 CE-000GI collected. Equipment

decontaminated. Flow CK-OK.

Filter CK-OK. Offsite to

154 SK. Rel.

1730 Onsite. Resident not home.

2005 CE-00039 stopped, post

calibrated and scaled.

2010 CE-00040 stopped, post

calibrated and scaled.

Alleguipment decontaminated.

Offsite fo CDM office.

Ref FSDS D-000102, SA-000214.

Samples locked in sample

storage. 2030 out of loy look.

1113/64 4 Hotely

# 1118 California Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100304	Page No.: <u>/9-20</u> Site Visit Date:/	119/04
Address: 1118 California		•
Occupant: Javier & Berta	Firmandez Phone	Number: 293-30/7
Owner (if different than occupant):	ene Sm. th Phone	Number:
Business Name: N/A		<u> </u>
Sampling Team: PARANA		<u>-</u>
Field Form Check Completed by (100% o	f forms) 40 ps	
	<i>'</i>	
Data Item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) - Dat	e Removal Completed: <u>03/63</u>
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
_	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	· · · · · · · · · · · · · · · · · · ·
Economic for territoring income	· · ·	
	Crawi Space Basement Sub-floor	
· · · · · · · · · · · · · · · · · · ·	None Other:	<u></u>
Interior cleaning conducted during removal	Yes (No)	
•	If Yes, which floors:	
	Basement Ground Second	
-	<del>-</del>	
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	
Location of vermiculite removed outdoors	Driveway Flowerbed - Garden	
•	Stockpile Yard None	-
ì	Other:	
A		
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	
<u>-</u> ·	Stockpile Yard (None)	
<b>-</b> .	Other:	·

Data Item	Value	. Notes
Pre-Sampling Interview (To be completed	d with resident)	· .
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately (to 2 months)	
	3 to 4 months 5 to 6 months	
<u> </u>	more than 6 months	·
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week  Twice a month  Once a month	
	Less than once a month  Other:	
Heating Source	Wood/Coal Electric Propane/Gas Other:	
Heat Distribution	Forced air Radiant Other:	
How soon after the removal was a forced air heating source first used?	1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	
lave any of the occupants been in contact vith any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties the occupants visit and may contain ermiculite	UNKNOWN	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where cupants work	Plum cree le contractor	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
,	+ speals broken english	(SUBNISH)

NO. 209 P. 2/2 0188

Sheet No.: SA-\_

	ELD SAMPLE DATA S	HEET (FSDS) FOR ST	ATIONARY AIR
	Loborasa Ava.		ato: 1/14/04 Fre Fichandes
ausiness Name:	NIA	Jirne Smith Davier "	Berta
Land Use: Residen	in School Commerc	iai Mining Roadway	Other ( )
AM :mae I Bailqmae		Names: PARANA	- W 11 11 - V 1 -
Data Item	1119 Canantin 1	Casatta 2	Cgasette 3
Index ID	CE- 00079		
Lacetten ID	A4-000647		
Semple Group	House		
Location Cascription	Kitchen / Hallom		
Catagory (alpaie)	F8 F9-(field blank) L9-(jot blank)	FS FB-(field blank) LB-(lot blank)	.FS FB-(field blank) LB-(int blank)
Matrix Type (skole)	India Outdoor NA	Indoor , Outroor NA -	Indust Outdoor NA
Filter Diameter (Amie)	25mm \$7mm	25mm 37mm	28mm 37mm
Pora Sixa (alrais)	TEM- 45 CM- 0.8	TEM46 PCM- 0.8	TEM- ,45 PCM- 0.8
ow Meter Type (chole)	Rotometer DryCal NA	Rotometer Prycel NA	Rotemeter DryCal NA
Pump ID Number	05913		
Flow Mater ID No.	92045-1	7 .	
Start Date	1/19/04		•
Start 'Time	0845		
Start Flow (L/min)	9.01		
Stop Data	1/19/04		
Stop Time	2003		
Stop Flow (Limin)	9.01		
Pump fault? (drais)	No Yas. NA	No Yes NA	No Yer NA
MET Station oneita?	No Yes, NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pra Post Clear 2 <sup>ml</sup> Clear 3 <sup>ml</sup> Clear NA	Pro Post Clear 2 <sup>M</sup> Clear 3 <sup>H</sup> Clear NA
Field Comments  Cassette Lot Number:  32415	filter overloaded with later le dust during last de hours of sample Archive Milinia (alicie); year No		Archive Stenk (direle): Yes No
QQ (Floid Team) Entered (LFQ)	Voipa:   Primed Validated	Active status (closes: Ass vio	Volps: Sintered Validated

For Field Team Completion (Provide initials)

Completed by BM

90 by 92

Sheet No.: D- 000106

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST

d Logbook No:	00304 Page No: _/	9-20 Sampling Da Owner/Tenant: Smith	te: <u>//19/04</u>
		_ Owned/Tenant: _ Sm.f/	·
Business Name:		· · · · · · · · · · · · · · · · · · ·	
Land Use: Residentia		•	Other (
Sampling Team: MAC	TEC (CDM)Other	Names: PHRANA	·
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00080	1	
Location ID	BD-000647		
Sample Group (circle)	Garage House, Shed,	Garage, House, Shed,	Garage, House, Shed,
(Subgroup of the property)	Pump House	Pump House /	Pump House /
	Other	Other	Other
Location Description	Basement, Ground Floor,	Basement, Ground Floor,	Basement, Ground Floor,
(circle)	Second Level	Second Level /	Second Level
(Detailed description point within	Other	Other	Other
the location)	Horizontal Surfaces	Horizontal Syrfaces	Horizontal Surfaces
Matrix Type (circle)	High Traffic Areas	High Traffic Areas	High Traffic Areas
	Other	Other	Other
tegary (circle)	FS F8-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)
Sample Area (cm²) (circle)	100 200 300 NA	100 / 200 300 NA	100 200 300 NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm .
Pore Size (circle) (	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal NA	Retometer Dry-Cal NA	Rotometer Dry-Cal NA
Pump ID No.	626666	I - W	
Flow Meter ID No.	B1610-51521	101/19/04	
Start Time	1425 1428 1432	7937	
Start Flow (L/min)	2.0 2.0 2.0	2.0	
Stop Time	1427 1430 1434	1439 y	
Stop Flow (L/min)	2.0 2.0 2.0	7.0 2 / //	9/04
Pump Fault? (circle)	No Yes -	No Yes	No Yes
Field Comments -	100 cm2 - Living Room	100 cm²-Top of hot water heater	100 cm²
Cassette Lot Number:	top of Refudgemental	100 cm <sup>2</sup>	100 cm <sup>2</sup>
<u></u>	100 cm2 - Hallway Floor	100 cm <sup>2</sup> –	100 cm <sup>2</sup>
<b>_</b>	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
Entered (LFO)	Volpe: Entered Validated	Entered Validated	Entered Validated
		· · · · · · · · · · · · · · · · · · ·	

For Field Team Completion		001
(Provide Initials)	Completed by LAY	QC by

1118 California Aver Vilene Smith PCE-EPA/Volpe Author: Gresory Parana Lyon Com Activity: Stationary Air and dust samples will be collected as part of the PCE. Sampling will be conducted in level D PPE IAN SAP Addendum, CSS, PCE Sampling 12/1/04. Rotometer 92045-1 will be used to calibrate the air samples. Dry Cal B1610. S 1521 will be used to calibrate LV pump for dust sampling. Ejuipment: Ret of 3 of this losbook. Alman Canowas the previous tenant but today Juvier & Buta Firmander NOW are the timents. They agreed to allow the PCE to continue. 0840 Orsite. CE-00079 pre-calibrated 0845 (E-00079 started. PIF BD-000647 completed with tenants Offsite 1150 Onsite. Flow CK, Filter CK-OK 1420 Onsite. Flow CK Filter CK -OK. Tenants present. n 1/19/04

1118 California Ave- Smith 1/18/04

OPE-EPA. Volpe
Anthor: Gressy Parang com by 1439 CE-000 80 (Dust) collected. P/p1/19/04 Ref FSDS 12-000106. 1620 Onsite Pump CK-OK AHLIAIAIN Filter CK-OK. 2003 CE.00079 stopped post-culibrate and scaled. Equipment decontaminated. Offsite. 2020 Onsite e CDM office. Samples lock in samule storage. Ref FSDS D.000106, 5A-000188 2041 Out of losbook

## 1120 California Ave

BD# 050646

## LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100304	Page No.: <u>21-23</u> Site Visit Date:	120/04
Address: /120 California)	<b>A</b>	
Occupant: Josh Parcish		Number: 293-5882
Owner (if different than occupant):	ene Smith - Phone i	Number: 503.784-1409
Business Name: N/A	<u> </u>	·
Sampling Team: PARANA		
Field Form Check Completed by (100% of	of forms): 40	
	31 /	
Data Item	·- Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: 3//5/6
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	Just Kneewalls
	Crawl Space Basement Sub-floor	UUST KNEEWEVED.
	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
- Ebbasion of Vermicalite (emailing mass)		HNIKNOWN .
•	Crawl Space Basement Sub-floor	1/21/04
	None Other:	
Interior cleaning conducted during removal	Yes (No	Thetalor
	If Yes, which floors:	14 WWOWN
	Basement Ground Second	
	Garage Attic Other:	
Was carpet removed during removal activities?	Yes No NA	·
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
	Stockpile Yard None	•
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	,
	Stockpile Yard (None	· - <u>-</u> -
	Other:	

where the occupants-visit and may contain Do these p	
has it been used since removal?  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  How often do you vacuum with your EPA provided HEPA vacuum?  How often do you vacuum with your EPA provided HEPA vacuum?  Wood/Coal Electric Propane/Gas  Other:  Heating Source  Wood/Coal Electric Propane/Gas  Other:  Heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculitie since the removal was completed?  Addresses of other homes or properties where the occupants visit and may contain  To be composite to the properties of the proper	
How often do you vacuum with your EPA provided HEPA vacuum?  How often do you vacuum with your EPA provided HEPA vacuum?  Once a week	
How often do you vacuum with your EPA provided HEPA vacuum?  Once a week More than once a week Twice a month Once a month  Less than once a month  Other:  Heating Source  Wood/Coal Electric Propane/Gas  Other:  Heat-Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain	-
How often do you vacuum with your EPA provided HEPA vacuum?  Twice a month Once a month  Cother:  Heating Source  Wood/Coal Electric Propane/Gas  Other:  Heat Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain	-
Twice a month Once a month  Less than once a month  Other:  Heating Source  Wood/Coal Electric Propane/Gas  Other:  Heat-Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositions or properties where the occupants-visit and may contain	
Less than once a month  Other:  Heating Source  Wood/Coal Electric Propane/Gas  Other:  Heat-Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositions.	-
Heating Source  Wood/Coal Electric Propane/Gas  Other:  Heat Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositives or properties where the occupants-visit and may contain	-
Heat Distribution  Forced air Radiant Other:  How soon after the removal was a forced air heating source first used?  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants visit and may contain  Wood/Coal Electric Propane/Gas Other:  Immediately 1 to 2 months 3 to 4 months 5 to 6 months  Mo Unknown Explain:  To be comporties where the occupants visit and may contain	<del> </del>
Heat-Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositive of the compositive of the composition of these positive air and may contain.	
Heat-Distribution  Forced air Radiant  Other:  How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositive of the composition o	
How soon after the removal was a forced air heating source first used?  Immediately 1 to 2 months  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  Other:  Immediately 1 to 2 months  S to 6 months  Explain:  To be compositive to be compositive to the c	
How soon after the removal was a forced air heating source first used?  Immediately  1 to 2 months  3 to 4 months  5 to 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositive or properties where the occupants-visit and may contain	
air heating source first used?  3 to 4 months 5 to 6 months  more than 6 months  Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  To be compositive on the compositive of the compositive o	
Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain	•
Have any of the occupants been in contact with any vermiculite since the removal was completed?  Addresses of other homes or properties where the occupants-visit and may contain  Yes  No  Unknown  Explain:  To be composite the properties where the occupants-visit and may contain	
Addresses of other homes or properties where the occupants-visit and may contain  With any vermiculite since the removal was completed?  To be completed?  To be completed to be completed to the complete the occupants of the complete the complete the occupants of the complete the	
where the occupants-visit and may contain Do these p	
vermiculite indoor or o	bleted by field personnel: roperties currently have utdoor vermiculite?
· · · · · · · · · · · · · · · · · · ·	
occupants work Do these p	oleted by field personnel: roperties currently have utdoor vermiculite?
-	
ADDITIONAL INFORMATION Close out folder + Tuteryew us	dto-
complete PTF. Tenant had been there for only	9 / 1

000156 -

Sheet No.: SA-

	ELD SAMPLE DATA S		
	/00304 Page No: _		hate: 1/20/04
	alitainia Ave		· -
	wift Sahaal Commons	Jilene Sm	•
Land Use: Residen Sampling Team: MA	·	•	Other ( )
Sampling ream. WA			
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	<b>Y</b> .		
	CE- 00082 /	CE- 00083	
Location ID	BD-000646	BD-000646	
Sample Group	House basement	the same has a same	1/2/04
Location Description	Basement	Busement	
		de la	12/04
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS F8-(field brank) LB-(lot black)	アルルート FS FB-(field/blank) LB-(lot blank)
Matrix Type (circle)	indoo Outdoor NA	(ndoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm / 37mm
Pore Size (circle)	TEM- 45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
ow Meter Type (circle)	Potomete DryCal NA	Rotomete DryCal NA	Rotometer DryCal NA
Pump ID Number	0689	0891-A	
Flow Meter ID No.	92045-1	92045-1	
Start Date	1/20/04	1/20/04	
Start Time	1005	1005	
Start Flow (L/min)	9.03	9.03	
Stop Date	1/20/64	1/20/04	
Stop Time	2038	2938	-
Stop Flow (L/min)	9.03	9.03	
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre - Post Clear
	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> /Clear 3 <sup>rd</sup> Clear NA
Field Comments	-1	Field Replicate	L-1/20/04
Cassette Lot Number:		of sample	- / //~ / - /
Oddone Editionides.	Assista Class /sizel-1: W 1:	CE-00082	Andre Control (Andre See
QC (Field Team)	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

For Field Team Completion
(Provide Initials)

Completed by GP QC by

Sheet No.: D-\_000108

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR DUST ress: 1120 (4/1/01/14) Page No: 21-23 Sampling Date: 1/20/04 Nd Logbook No: 100304 Page No: 21-23 Business Name: A Jilene Smith School Land Use: Residential Commercial Roadway Minina Other ( Sampling Team: MACTEC (CDM) Other \_\_\_\_\_ Names: Parage ,//20/09 Cassette 1 Data Item Cassette 2 Cassette 3 Index (D CE- 00086 Location ID 8,0-000646 Garage, House, Shed, Garage, House, Shed. Garage, House, Sheft, Sample Group (circle) Pump House Pump House Pump House (Subgroup of the property) Other Other\_ Other\_ Basement Ground Floor Location Description Basement, Ground Floor, Basement, Ground Floor, Second Level Second Level Second Level (circle) Other -Other Other (Detailed description point within the location) Horizontal Surfaces Horizontal Surfaces Horizontal Surfaces High Traffic Areas High Traffic Areas High Traffic Areas Matrix Type (circle) Other Other\_ Other\_ FS FB-(field blank) LB-(lot blank) FS FB-(field blank) L8-(lot blank) tegory (circle) FS FB-(field blank), LB-(lot blank) Sample Area (cm2) 2**d**0 100 NA 100 200 300 NA 100 300 NA (circle) 600 Filter Diameter (circle) 25mm 25mm/ 25mm 37mm 37mm 37mm TEM-1.45 TEM-.45 PCM- 0.8 TEM- .45 PCM- 0.8 Pore Size (circle) PCM- 0.8 Pry-Cal ) -NA Dry-Cal Flow Meter Type (circle) Rotometer Rotómeter Rotometer Dry-Cal NA 626666 Pump ID No. 101/20/04 Flow Meter ID No. B1610-51521 Start Time Start Flow (L/min) 2.0 2:0 2.0 1328 1336 1346 Stop Time 1340 /343 Stop Flow (L/min) **2.**0 Yes Pump Fault? (circle) 100 cm2 Bedroom window 100 cm2 Field Comments 100 cm Basement flood 100/cm2 -100 cm² - 6 round level top of refriderator -/p/30/34 Cassette Lot Number: Couse of steps 100 cm2 - 2 md/2 ve/ 100 cm2 - Basement to 100 cm2 Archive Blank (circle): Yes - No Archive Blank (circle): Yes Entered (LFO) 13 Entered \_\_\_\_\_ Validated \_\_\_\_ Volpe: Entered Validated Entered Validated

For Field Team Completion	Completed by	( 5.7	QC by	12	
(Provide Initials)	Completed by	G'Y'	 ac sy		

NO.203

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Sheet No.: SA-\_

LIBBY F	ield s	AMPLE	E DATA : Page No: _	SHEET I	(FSD	S) FOR	ST	ATIC	ANC	RY AIF 20/64	t
ress: _//2/0_C			Ave			ant Jo					
Jusinese Name:	ein.	<del></del>				Tilene	<u> </u>			<del>,</del>	
Land Use: Residen		ichael	Commen		inIng_	Roady		Qt	her (		)
Sampling Team: MA	CTEC (	CDM	ther			MANI	<u>.                                    </u>	<del>-</del>		- · · - <del>- //-</del>	····
Data Item	1911	Casset	te 1	17"	Casa	ette 2	· · · · ·		C	essette	3
inglan (8			7	7/	2						
	CE	- 0001	32	1 CE	- 000	283					2
Lacation ID		-	LVL	AB.	444	646					<u>'</u>
Semple Graup	سنجوز سيدات		-basemen	- 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4			ere it	1/2/	4		
Lengton Description		es mas		<u> </u>			,			7.	
	624	<b>10</b> to take it c	¥ 7	50	sf aa	eat				1/	
					_		بمسط	March .	<u>,                                     </u>		
Colegory (circle)	Pa)ra-	(flaid blank)	LB-(let blank)	FS FB-(		CEO(let b)	PK	12	51/04 8-(14	(Jalank) j. B	-(lot blank)
Matrix Typa (circle)	Tru Co			Indoor	Outo		1	indac		Dutdoer .	NA
Fifter Diameter (strate)	28mm	37n	neri	25mm	3	7mm		25mr	n /	37mm	
Core Size (sirge)	TEM4		4-0	TEM45	7	CM-QB		TEM-	.48	PCM- 0	), <b>A</b>
Flow Mater Type (eirole)	A STATE			Referret	<u> </u>	ryCal N	A	Rotor	natar	DryCal	NA
Pump ID Number	The Person Name of Street,	2689	7	0	891	A			$\mathcal{I}$		
Flow Meter ID No.	9	2093	-/	9.	204	5.1		,	$\int_{-\infty}^{\infty}$		_
Start Cate		120	104		1/2	1/04			T		
Start Time	1005			1005					TT		
Start Flow (L/min)	9.03			203							
Stop Date		120/	14		120	104					
Stop Time	2038			2435						1	- ;
Stop Flow (L/min)	203			9.05						<del></del>	
Pump fault? (alrais)	(NO)	Yes	NA .	(No)	Yes	NA NA		Ng	Yı	s NA	,
MET Station onsite?	No	Yes	NA	Na	Yes	NA NA		Nα	Y	a NA	
Sample Type	Pra	Post	Clear	Pre	Post	Clear	7	Pre			PAT
	1	3 <sup>rd</sup> Clear		2 <sup>rid</sup> Cigar				2 <sup>nd</sup> /Cl			IA
Field Comments	, ,			Field	_			$\mathcal{T}$		4	Tier
			•	0754				-		61/20	197
Cassette Lot Number:				CE-0	do E	2					
OC (Floid Team"		ink (drele):	Yas No	Archive Bla	uk (circie	Yes No			0.116.11.164	cipie): Ye	<u>No</u>
QC (Field Team)	Volpa: Entered_	Valid	lated	Volpa: Enternd_	· Vı	niidated		Volpe: Entere		_ Vaikiate	d
	r Field T <b>eam</b> Dylde Indiele		Com	pleted by G	P	QC by		R			

1120 California Ave Smith PCE-EPAL Volpe Towart Perrich Author: Gerry Taran COM LAD Activity. Stationary for and dust sample will be completed as part of the PCE. Sampling will be conducted in level DPPE IAW SAP Addendum CSS, PCE Sampling 12/1/03. Equipment Retips 3 of this logbook. 10720 1V Pump 626666 calibrated to 2.0 l/m in with Dix-Cal \$1610-51521 CCDM office. 0825 Onsite Nobody answered the door Called and left amessage 0945 Confected by volunteer and given permission to complete the sampling. 0955 ONSITE CE-00082,83 pre-alibrate CE-00083 is a field riplicate of CE-00082 1005 CE-000 82, 83 started. CE-00084 pro-calibrated. 1010 CF-00084 started (Ground kiel) CE-00085 pre-calibrated 1012 CE-00085 started. (2nd level) PIF BD.000646 completed with Josh Partish 1/20/04

1120 California Auc Onner-Smith 1/20/00 CE-EPA-Volpe Tenant-Parish
Anthor Gregory Parane 1-12 com
1325 Onsite. 1120 California Ave. Owner-Smith 1/20/4 PCE EPA-Volpe Tenant-Parish Author: Gregory Parana for 12 COM 2100 Onsite CDM office. 1346 CE-00086 (Dust) collected. Samples placed in sample (E-00084, 85 Filterappear storage. Ket FSDS SA-000156, to be loaded with smoke. 210, D-000108. Flow ck allsamples . OK. 2130 Out of lay book. 1650 Unsite. CE-00082,83,84,85 loading with smoke. Furnace muy need filter changed. 2030 Ovisite. Samples will be stopped. CE-00084,85 appear to be heavily louded with smoke particulate. -----2038 CE-00082, 83 stopped, post calibrated and scaled. -2046 CE-00084 stopped, post calibrated and scaled. 2050 CE-00085 stopped, post calibrated and scaled. Equipment decontaminated . Offsite. Resident was informed of turnace filter. Hechanged it before I lett site. Filter was very clossed.

### 1231 Nevada Ave

#### LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: /60364	Page No.: 24 Site Visit Date: //	27/04
Address: 1231 Nevada Ave	,	
Occupant: Jean Sonju	•	Number: <u>293 · 565 5</u>
Owner (if different than occupant):	54mt Phone	Number: Same
Business Name: N/A		
Sampling Team: PARANA, C	DM.	
Field Form Check Completed by (100% of	of forms): 40 ps	
	, , , ,	<u></u>
Data item	Value	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Dat	e Removal Completed: 10/03
Location of vermiculite removed indoors	Attic Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other:	
Location of vermiculite remaining indoors	Attic Walls (interior or exterior)	
a social of termination for the social state of the social state o	` -	
	Crawl Space Basement Sub-floor	
	None Other	
Interior cleaning conducted during removal	Yes (No)	
	If Yes, which floors:	
	Basement Ground Second	•
	Garage Attic Other:	
		<u> </u>
Was carpet removed during removal activities?	Yes No NA -	
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	Along back
- , <del>-</del>	Stockpile Yard None	l <i>f</i> 1
•	Other:	ot house
t agation of unamiquity remaining authors		
Location of vermiculite remaining outdoors		
- ·	Stockpile Yard None	
	Other:	

Data Item	Value	. Notes
Pre-Sampling Interview (To be complete	d with resident)	
Has EPA provided a HEPA vacuum and has it been used since removal?	Yes No  If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:  Immediately 1 to 2 months	Recieved I week
·	3 to 4 months 5 to 6 months  more than 6 months	
How often do you vacuum with your EPA provided HERA vacuum?	Once a week  Twice a month  Once a month	
	Less than once a month  Other:	
Heating Source	Wood/Coal Electric Propane/Gas Other: Fac O	
Heat Distribution	Forced air Radiant Other:	Cerling vents
How soon after the removal was a forced air heating source first used?	1 to 2 months 3 to 4 months 5 to 6 months more than 6 months	-
Have any of the occupants been in contact with any vermiculite since the removal was completed?	Yes No Unknown	Explain:
Addresses of other homes or properties where the occupants visit and may contain vermiculite	None	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
Addresses or names of business where occupants work	Son- Libby Dam Jeun- ! Afternoon (month she volunteers a the Libby Thrift Shop- on Utuh	To be completed by field personnel: Do these properties currently have indoor or outdoor vermiculite?
ADDITIONAL INFORMATION		
		<del></del>

Sheet No.: SA- 000174

LIBBY	FIELD SAMPLE DATA S	SHEET (FSDS) FOR S	TATIONARY AIR
Field Logbook No:	/00304 Page No:	Sampling I	Date: 27/27/04 //20
Business Name:	Nevada Avt.	Owner/Tenant: <u>U≪◆₩</u>	SONJU
Land Use: Reside		ial Mining Roadway	Other ( )
Sampling Team: M	ACTEC CDM Other	Names: PARANA	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID			
	CE- 00104		
Location ID	BD-001197		
Sample Group	House		/-
Location Description	Master Bedroom		
	<u>, , , , , , , , , , , , , , , , , , , </u>		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(tot blank)
Matrix Type (circle)	Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM45 PCM- 0.8	TEM45 PCM- 0.8	TEM45 PCM- 0.8
ow Meter Type (circle	) Rotomete DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	05913		
Flow Meter ID No.	92045-1		
Start Date	1/26/04		
Start Time	0810		
Start Flow (L/min)	9.03		_
Stop Date	1126/04		
Stop Time	1930	_ /	-
Stop Flow (L/min)	9.24		
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre Post Clear
<del>-</del> :	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments	-		-p1/26/64
310201 Cassette Lot Number:			·
3241511241	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team)	Volpe:	Volpe:	Volpe:
Entered (LFO)	Entered Validated	Entered Validated	Entered Validated
.) Fi	or Field Team Completion	225	····
(F	Provide Initials)	eted by QC by	

0	0	0	1	1	8
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Sheet No.: D-

_	BY FIELD SAMPLE		•		, .
d Logbook No: /	00304 Page No	o: <u>24</u>	Sampling Da	te: <u>//26/</u>	84
	levade Ave.	Owner/Tena	nt: Jean S	<u>sowju </u>	
Business Name: ~/					
Land Use: Residenti		•	Roadway.	Other (	. )
Sampling Team: MAC	TEC CDM Other	Names: <u>PA</u>	KAN4	<del></del>	<del></del>
Data Item	Cassette 1	Cass	ette 2	Cas	ssette 3
Index ID	CE 0010E				
- <del></del>	CE- 00105		<del>/</del>		/
Location ID	BD-001197				
Sample Group (circle)	Garage, House, Shed,	Garage, House,	Shed,	Garage, Hous	se, Shed,
(Subgroup of the property)	Pump House	Pump House	/	Pump House	/
	Other	Other	/	Other:	<del></del> _
Location Description	Basement, Ground Floor,	Basement, Grøt	und Floor,	Basement, G	round Floor,
(circle)	Second Level	Second Level /	-	Second Level	- 1
(Detailed description point within the location)	Other		<del></del>	Other	<del></del> _
Matrix Type (circle)	Horizental Surfaces High Traffic Areas Other	Horizontal Surface High Traffic Areas Other		Horizontal Sur High Traffic Ar Other	1
ategory (circle)	(FS) FB-(field blank) LB-(lot t	plank) FS FB/(field blank	k) ( B-/tot black)	FS FR-(field h	lank) LB-(lot blank)
_ <del></del>	TO TO BE CHOICE	The state of the s	N) ED (IOI OIDIN)		25-(10: 516:11)
Sample Area (cm²) (circle)	100 200 400	NA 100 / 200	300 NA	100 200	300 NA
Filter Diameter (circle)	25mm 37mm	25m/m 37	7mm	25mm	37mm
Pore Size (circle)	TEM- 45) PCM- 0.8	TEM45 _P0	CM- 0.8	TEM45	PCM- 0.8
Flow Meter Type (circle)	Rotometer (Dry-Cal)	NA Rotometer Dr	y-Cal NA	Rotometer	Dry-Cai NA
Ритр ID No.	502077		h		
Flow Meter ID No.	B1610-51521		/P1/06/04		
Start Time		24 1/28 -			
Start Flow (L/min)	2.0 2.0 2.				
Stop Time	1120 1123 112				
Stop Flow (L/min)	2.0 2.0 2.			26/04	
Pump Fault? (circle)	No Yes	No Yes	-	No /	res 
Field Comments	100 cm2 Living Room		A Room	100 cm <sup>2</sup>	-/4
Cassette Lot Number: -	100 cm2 - Master Bed	100 cm <sup>2</sup>		100 cm	1/20/07
	100 cm2 - Writing roo.	100 cm <sup>2</sup>		100 cm²	-
	top of desk.			_	
2/11	Archive Blank (circle): Yes N			Archive Blank (circ	
Entered (LFO)	Volpe: Entered Validate	ed Entered Va	lidated	Entered	Validated
; For Fi	eld Team Completion				

Completed by

(Provide Initials)

QC by

1231 Nevada Avc. - Sonju 24 PCE - EPAIVOIPE 1/26/04 Author: Gregory Parana Theyall CDM Activity: Stationary vand dust samples will be collected as part of the ME. Sampling will be conducted IN LEVEL DPPE TAW SAP, Addendum CSS, Post Clean Up Evaluation Sampling Equipment: Ret po 3 of this losse of. LV Pumo 502077 Calibrated with DryCal B1610-51521 @ CDM office 0720. 0800 Ousite. CE-00104 pre-calibrated. 0810 CE-00104 started (Bedroom). 1100 Onsite. CE-00104 flow Ck-OK Filter CK-OK. 1130 CF 00105 (Dust) collected Offsite to 1417 Washington. - -1420 Onsite. Flow Ck Filter Ck-OK. PIF-BA-001197 completed with Jean Sonja. Offsite. 1710 Onsite. Flow Ck Filter Ck-OK. ,930 Onsite. CE-00104 stopped post calibrated and scaled. Equipment decontaminated. 2010 Owsite CDM office. Samples placed in Sample storage, Ref FSDS SA-000174. .000/18. Out of losbook. 1/26/04

## 1202 Idaho Ave

# LIBBY ASBESTOS PROJECT Pre-Sampling Interview Form (PIF) for Post Clean-up Evaluation Sampling

Field Logbook No.: 100304	Page No.: <b>25</b> Site Visit Date://	
Address: 1202 Tdaho Ave.	Structure Description	House
Occupant: Bill Mc Gough Co.	Meen Delk. Marshal Phone	Number: 293 · 248 3
Owner (if different than occupant):	elkMarshal Phone	Number: 54mc
Business Name: ~/^		<del></del>
Sampling Team: PARANA · CL	) M	<u>-</u>
Field Form Check Completed by (100% of	of forms):	
Data Item	Value .	Notes
CLEAN-UP SUMMARY (To be completed	using removal completion folders) Date	e Removal Completed: 12/63
Location of vermiculite removed indoors	(Attic ) Walls (interior or exterior)	
	Crawl Space Basement Sub-floor	
	Other:	
Location of vermiculite remaining indoors	Attic (Walls (Interior or exterior)	
	Crawl Space Basement Sub-floor	
	None Other:	
Interior cleaning conducted during remova	Yes No	
	If Yes, which floors:	
_	Basement Ground Second	,
	Garage Attic Other:	•
Was carpet removed during removal	Yes No NA	<u> </u>
activities?	14.	· · · · · · · · · · · · · · · · · · ·
Location of vermiculite removed outdoors	Driveway Flowerbed Garden	
, · · ·	Stockpile Yard None	•
	Other:	
Location of vermiculite remaining outdoors	Driveway Flowerbed Garden	-
	Stockpile Yard None	
<u> </u>		<del></del>
	Other	

	Value	Notes
Pre-Sampling Interview (To be complete	d with resident)	· · · · · · · · · · · · · · · · · · ·
Has EPA provided a HEPA vacuum and	Yes No	
nas it been used since removal?	If Yes, how long after the removal was completed did use of the EPA-issued HEPA vac begin:	
• . •	Immediately 1 to 2 months	
	3 to 4 months 5 to 6 months	
	more than 6 months	
How often do you vacuum with your EPA provided HEPA vacuum?	Once a week More than once a week	
	Twice a month Once a month	
	Less than once a month	
	Other:	
leating Source	Wood/Coal Electric Propane/Gas	
	Other:	<u> </u>
leat Distribution	Forced air Radiant Other:	
low soon after the removal was a forced ir heating source first used?	Immediately 1 to 2 months	No Forcedair
	3 to 4 months 5 to 6 months  more than 6 months	heat
ave any of the occupants been in contact ith any vermiculite since the removal was ompleted?	Yes No Unknown	Explain:
ddresses of other homes or properties here the occupants visit and may contain emiculite	None	To be completed by field personne Do these properties currently have indoor or outdoor vermiculite?
ddresses or names of business where	Refired-	To be completed by field personne Do these properties currently have
······································	Ketire a	indoor or outdoor vermiculite?
DDITIONAL INFORMATION		

Sheet No.: SA-\_\_\_000179

	IELD SAMPLE DATAS	SHEET (FSDS) FOR S	TATIONARY AIR
Id Logbook No: _	/00304 Page No: _	Sampling	Date: _//29/04
	Iduho Ave	Owner/Tenant:	(· Marshall
	N/ School Commerce	ial Mining Doodway	Other (
Land Use: Resider	ntial School Commerc	<b>9</b>	Other ( )
Sampling ream. W.		Traines. /////////	
Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CE- 00113		<del></del>
Location ID	BD-000237		
Sample Group	House		
Location Description	South Sewing Room		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS F9-(field blank) L8-(lot blank)	F\$ FB-(field blank) LB-(lot blank)
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Jadoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pere Size (circle)	TEM45 (CM- 0.8)	TEM45 PCM- 0.8	TEM45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	0689	/	
Flow Meter ID No.	92045-1	,	
Start Date	1/29/04		
Start Time	0840		
Start Flow (L/min)	9.03	/ -	
Stop Date	1/29/04	· /	<u>-</u>
Stop Time	1955		
Stop Flow (L/min)	9.03		
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear	Pre Post Clear	Pre Post Clear
_	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear (NA)	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA	2 <sup>nd</sup> Clear 3 <sup>rd</sup> Clear NA
Field Comments		/	1/2 1/25/01
			TD IV
Cassette Lot Number:		-	<i>(</i> )
	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:	Archive Blank (circle): Yes No Volpe:
QC (Field Team) Entered (LFO)	Entered Validated	Entered Validated	Entered Validated

000133

Sheet No.: D-

d Logbook No: 10					•	•	ate: <u>//24/</u>	04
Iress: 1202 Z	daho	Ave					Marsha	
Business Name:			,	- <del>-</del>	·			
Land Use: (Residentia	ar Sc	hool	Commercia	al Minir	ng Ro	padway	Other (	)
Sampling Team: MAC			er	_ Names:_	PARA	MA		
Data Item	1,21	द्र / <b>०५</b> Cassett	te 1		Cassette	2	С	assette 3
index ID	CE	- 0011	.4					
Location ID		-000,	'					/_
Sample Group (circle)	. ,	House SI	hed,		House, She	ed. ∕	Garage, Ho	
(Subgroup of the property)	Pump H	ouse		Pump Hou	ıse	/	Pump Hous	e
	Other_			Other		/	Other	
Location Description	Baseme	nt, Ground	Floor,	Basement	Ground/f	=loor,	Basement,	Ground Floor,
(circle)	Second Level		Second Le	evel /		Second Leve	el /	
(Detailed description point within	Other			Other		<u> </u>	Other	<u> </u>
the (ocation) —	Horizont	al Surize 63	<u> </u>	Horizontal	Surfaces	<del></del>	Horizontal S	urtacels
Matrix Type (circle)	High Traffic Areas		High Traffic Areas		High Traffic Areas			
	Other		Other		Olher			
itegory (circle)	FS FB-	field blank)	LB-(lot blank)	FS FB-(fie	d blank) L!	B-(lot blank)	FS FB-(field	l blank) LB-(lot blani
Sample Area (cm²) (circle)	100	200	90 NA	100	00 300	) NA	100 200	300 NA
Filter Diameter (circle)	25mm	37m	m	25mm/	37mm		25mm	37mm
Pore Size (circle)	TEM36	РСМ	- 0.8	TEM .45	РСМ-	0.8	TEM45	PCM- 0.8
Flow Meter Type (circle)	Rotomete	r Ory-C	a) NA	Rotometer	Đry-Ca	I NA	Rotometer	Dry-Cal NA
Pump ID No.	4	2466	,6	7	<b>)</b>		-	T .
Flow Meter ID No.	8161	0-515	521	<u></u>		1/29/04	<u> </u>	
Start Time	1146	1150	1154	1/57		· ·	<u> </u>	<i></i>
Start Flow (L/min)	2.0	2.0	2.0	2.0		<u> </u>		<u> </u>
Stop Time	1148	1152	1156	459			<u> </u>	
Stop Flow (L/min)	20	2.0	2.0	2.0				
Pump Fault? (circle)	No	Yes		Ne	<del>Yes</del>	12/2/0	No /	Yes
Field Comments	100 cm <sup>2</sup>	LIVING	Roc m	100 cm² K	itchen idsera		100 cm²	
Cassette Lot Number:	100 cm² 4	Hallwa	y Floor	100 cm²	•		100 cm²	1/29/
· · ·	100 cm² -	Dering	Rm	100 cm²		_	100 cm <sup>2</sup>	
	Archive Bla	nk (circle): `	Yes No	Archive Blank	(circle): Ye	s No	Archive Blank (	circle): Yes No
Entered (LFO)	Volpe: Ent	ered <del></del> -	Validated ·	Entered	Validati	ed	Entered	Validated
<del></del>			<del></del>		<del></del>			-

( <del> </del>		
For Field Team Completion	Completed by	ас ьу
(Provide (nitials)	Completed by	1 90 07

1202 Idoho Ave. DelK-Muishall 1/29/04 PCE-EPA-Voloc Author: Gregory Parana In D COM Activity: Stationary Air and dust samples will be collected as part of the PCE in BO-000237. Samplin will be conducted on level DPPE IAW SAPAddendum, CSS, PCE Sampling 1/12/03 Epupment Ret. pg 3 of this logbook. LV Rimp 626666 calibrated with Pry. Cal B1610. 51521 @ 720. 0835 Oursite. CE+00113 pre-calibrated 0840 CE-00113 (Sewing Rin) started. 1135 ONSITE. PIFBD:000237 completed with Bill M'Gough. 1159 CE-00114 (dust) collected. CE-00113 flow Ck, filter Ck-OK. 1520 Onside. CE-00113 Flow, F. He CK-OK 1955 Onsite CF-00113 stopped: postcalibrated and scaled. 2010 Onsite & CDM office. Sumples locked in sample storage. 2020 Out of logbook. RefFSUS U-000133, SA-000179. 1/29/04

# Appendix B Libby Field Office Record of Modification Forms

#### **Request for Modification**



to the

Libby Sampling and Quality Assurance Project Plan Field Activities LFO-000064a

(Clarification to LFO-000064a is detailed in italics below.)

Instructions to Requester: Fax to contacts at bottom of form for review and approval.

File approved copy with Data Manager at the Libby Field Office (LFO).

Data Manager will maintain legible copies in a binder that can be accessed by LFO personnel.

Project QAPP (circle one):		
• • • • • • • • • • • • • • • • • • • •	Phase I (approved 4/00)	Phase II (approved 2/01)
	Removal Action (approved 7/00)	Contaminant Screening Study (approved 5/02
	Other (Title and approval date): The	nis modification applies to all project QAPPs
	· · · · · · · · · · · · · · · · · · ·	and all air sampling activities with the
	<del>*</del>	<del></del>
•	exception of clearance air samplin	g activities.
		e detailed in the Dust Sampling and Analysis procedures are detailed in the respective
<u> </u>		
Other Document (Title, Num	nbe <u>r/</u> Revision):	:
Requester: Terry Crowell	- т	itle: Sample Coordinator
Company: CDM	-	pate: 7/15/03
Company. Colv		rate. 1713/03
	•	
Description of Modification:		
		lected at a frequency of one per team per day
and analyzed at a frequency	of one per team per week. The fiel	ld blanks to be analyzed each week will be
and analyzed at a frequency designated by the Libby same	of one per team per week. The field op the coordinator to evaluate each teach	ld blanks to be analyzed each week will be am's sample collection technique. Because
and analyzed at a frequency designated by the Libby san field teams are currently coll	of one per team per week. The fiel note coordinator to evaluate each te ecting either dust or air samples, th	Id blanks to be analyzed each week will be am's sample collection technique. Because blanks to be analyzed each week will be
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The	of one per team per week. The fiel hple coordinator to evaluate each te- lecting either dust or air samples, the appropriate quality control sample a	Id blanks to be analyzed each week will be am's sample collection technique. Because blanks to be analyzed each week will be analysis frequency (see attached table) will
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and du	of one per team per week. The fiel hple coordinator to evaluate each tea lecting either dust or air samples, the appropriate quality control sample a st samples independently. If at any	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the	of one per team per week. The field of one per team per week. The field open coordinator to evaluate each teater than the each than the each teater than the	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect the appropriate quality control
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and du both air and dust samples, the sample analysis frequency is	of one per team per week. The fiel of one per team per week. The fiel ople coordinator to evaluate each teatering either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. The	Id blanks to be analyzed each week will be am's sample collection technique. Because blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect at the appropriate quality control se field blanks collected but not submitted for
and analyzed at a frequency designated by the Libby san field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the sample analysis frequency is analysis will be archived in the	of one per team per week. The fiel ople coordinator to evaluate each teatering either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. Those event contamination in field blanks	Id blanks to be analyzed each week will be am's sample collection technique. Because the blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect the appropriate quality control see field blanks collected but not submitted for its observed. Frequency of field blanks
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and du both air and dust samples, it sample analysis frequency is analysis will be archived in the collected for clearance air sa	of one per team per week. The field in ple coordinator to evaluate each teat ecting either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. Those event contamination in field blank impling is not included in this modifier.	Id blanks to be analyzed each week will be am's sample collection technique. Because blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect at the appropriate quality control se field blanks collected but not submitted for
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and du both air and dust samples, the sample analysis frequency is analysis will be archived in the	of one per team per week. The field in ple coordinator to evaluate each teat ecting either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. Those event contamination in field blank impling is not included in this modifier.	Id blanks to be analyzed each week will be am's sample collection technique. Because the blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect that the appropriate quality control se field blanks collected but not submitted for its observed. Frequency of field blanks
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the sample analysis frequency is analysis will be archived in the collected for clearance air sa Response Action Work Plan	of one per team per week. The field in ple coordinator to evaluate each temple coordinator to evaluate each temple coordinator dust or air samples, the appropriate quality control sample ast samples independently. If at any the sample coordinator will ensure the maintained for each medium. The event contamination in field blank impling is not included in this modific (Estimated August 2003).	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect that the appropriate quality control se field blanks collected but not submitted for its observed. Frequency of field blanks cotton and will remain as defined I the
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the sample analysis frequency is analysis will be archived in the collected for clearance air sa Response Action Work Plan	of one per team per week. The field in ple coordinator to evaluate each teat ecting either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. Those event contamination in field blank impling is not included in this modifier.	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect that the appropriate quality control se field blanks collected but not submitted for its observed. Frequency of field blanks cotton and will remain as defined I the
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and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, it sample analysis frequency is analysis will be archived in the collected for clearance air sa Response Action Work Plan Field logbook and page num	of one per team per week. The fiel inple coordinator to evaluate each teater each getting either dust or air samples, the appropriate quality control sample as a samples independently. If at any the sample coordinator will ensure the maintained for each medium. Those event contamination in field blank impling is not included in this modific (estimated August 2003).	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect that the appropriate quality control se field blanks collected but not submitted for its observed. Frequency of field blanks cation and will remain as defined I the
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the sample analysis frequency is analysis will be archived in the collected for clearance air same Response Action Work Plan Field logbook and page num Reason for modification:	of one per team per week. The field pipe coordinator to evaluate each teater that the ecting either dust or air samples, the appropriate quality control sample as a sample independently. If at any the sample coordinator will ensure the maintained for each medium. The event contamination in field blank impling is not included in this modific (estimated August 2003).  The modification is documented on:  analytical methods, quality control samply to the end of	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect the appropriate quality control se field blanks collected but not submitted for its is observed. Frequency of field blanks cation and will remain as defined I the
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the sample analysis frequency is analysis will be archived in the collected for clearance air sa Response Action Work Plan.  Field logbook and page num. Reason for modification: As written in the referenced a high given the number of sambeen reduced to meet the current.	of one per team per week. The field in ple coordinator to evaluate each teating either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. The event contamination in field blank impling is not included in this modific (estimated August 2003).  ber modification is documented on:  analytical methods, quality control sampling locations that will be visited a prent needs of the project. That is, leading the sample of the project.	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect that the appropriate quality control se field blanks collected but not submitted for its is observed. Frequency of field blanks cation and will remain as defined I the
and analyzed at a frequency designated by the Libby sam field teams are currently coll independent of media. The be maintained for air and duboth air and dust samples, the sample analysis frequency is analysis will be archived in the collected for clearance air sa Response Action Work Plan. Field logbook and page num. As written in the referenced a high given the number of sambeen reduced to meet the current.	of one per team per week. The field in ple coordinator to evaluate each teating either dust or air samples, the appropriate quality control sample as st samples independently. If at any the sample coordinator will ensure the maintained for each medium. The event contamination in field blank impling is not included in this modific (estimated August 2003).  ber modification is documented on:  analytical methods, quality control sampling locations that will be visited a prent needs of the project. That is, leading the sample of the project.	Id blanks to be analyzed each week will be am's sample collection technique. Because to blanks to be analyzed each week will be analysis frequency (see attached table) will point field teams are requested to collect that the appropriate quality control se field blanks collected but not submitted for its observed. Frequency of field blanks cation and will remain as defined I the

	ion (choic one).		
Temporary	Date(s):		
	Resident address	s(es):	
	- If appropriate	e, attach a list of all app	plicable Index Identification numbers.
Permanent (	complete Proposed	Modification Section)	Effective Date: July 7, 2003
		n additional sheets if ne ection B2, Field QA/QC	ecessary; state section and page Samples, page 21
echnical Review:	t Manager or design	nate)	Date:
Approved By:	nedial Project Mana	Title <sup>.</sup>	Date:

#### SUMMARY OF FIELD BLANK RESULTS ANALYZED BY TEM-ISO 10312

ection Frequency (DF)

	Direct		Indirect		
Mineral	N samples t	otal =1334	N samples	total = 371	
Туре	N detects <sup>a</sup>	DF	N detects	DF_	
LA	2	0.15%	4	1.08%	
OA	0	0.00%	1	0.27%	
С	2	0.15%	35	9.43%	
Total	4	0.30%	39	10.51%	

DF = number of field blanks with 1 or more structures / total number of field blanks

Loading (s/mm²)

Mineral			Direct			In	direct	
Туре	Total N	avg (all)	avg (detects)	max (detects)	N structures	avg (all)	avg (detects)	max (detects)
LA	4	0.03	21.8	27.3	6	0.20	19.0	31.3
OA	0	all ND			1	0.04	16.4	16.4
<u> </u>	4	0.03	18.6	27.3	97	3.62	38.4	344.3
Total	8	0.0607	20.2	27.3	104	3.87	36.8	344.3

Loading (s/mm²) = N structures / (GOs counted · GO Area)

Loading (s/sample)

Mineral		Direct			Indirect	
Туре	avg (all)	avg (detects)	max (detects)	avg (all)	avg (detects)	max (detects)
LA	0.003	2.0	3	0.016	1.5	2
OA	all ND			0.003	1.0	1
C	0.003	2.0	3 {	0.261	2.8	21
Total	0.006	2.0	3	0.280	2.7	21

ding (s/sample) = N structures / N samples total, where 10 GOs per sample

#### SUMMARY OF FIELD BLANK RESULTS ANALYZED BY TEM-AHERA/ASTM

Detection Frequency (DF)

	Dire	ect	Indirect		
Mineral	N samples total =1267		N samples	total = 77	
Туре	N detects <sup>a</sup>	DF	N detects	DF	
LA	1	0.08%	0 .	0.00%	
J OA	0	0.00%	0	0.00%	
C	1	0.08%	00	0.00%	
Total	2	0.16%	0	0.00%	

DF = number of field blanks with 1 or more structures / total number of field blanks

Loading (s/mm²)

Mineral	Direct				la	direct		
Туре	Total N	avg (all)	avg (detects)	max (detects)	N structures	avg (all)	avg (detects)	max (detects)
Total Asb	2	0.01	4.4	8.0	0	ND		••

Loading (s/mm²) = N structures / (GOs counted · GO Area)

Loading (s/sample, 10 GOs per sample)

rosamy (	sisampie, io	OOS PCI SUITE				
Mineral [		Direct			Indirect	
Type	avg (all)	avg (detects)	max (detects)	avg (all)	avg (detects)	max (detects)
Total Asb	0.002	1.0	1.0	ND		

Loading (s/sample) = N structures / N samples total, where 10 GOs per sample

Note: Calculations exclude all Lab QC samples (eg: Recounts), analyses in which GO was not = 10, and potential duplicate analyses. Based on Libby2 Database download dated January 5, 2004.

<sup>&</sup>lt;sup>a</sup> Based on all structures (regardless of dimensions).

Based on all structures (regardless of dimensions).

#### Request for Modification



to the

#### Libby Sampling and Quality Assurance Project Plan Field Activities LFO-000064b

(Clarification to LFO-000064 is detailed in italics below.)

Instructions to Requester: Fax to contacts at bottom of form for review and approval.

File approved copy with Data Manager at the Libby Field Office (LFO).

Data Manager will maintain legible copies in a binder that can be accessed by LFO personnel.

Project QAPP (circle one):	Phase I (approved 4/00)	Phase II (approved 2/01)			
	Removal Action (approved 7/00)	Contaminant Screening Study (approved 5/02)			
	Other (Title and approval date):	This modification applies to all project QAPPs			
	governing dust sampling activities and all air sampling activities with the				
	exception of clearance air sampl	ing activities.			
		re detailed in the Dust Sampling and Analysis perfund Site Rev. 0 (August 7, 2003); air			
	tailed in the respective QAPPs.				
Other Document (Title, Num	ıber/Revision):				
	•				
Requester: <u>Terry Crowell</u>	<del></del>	Title: Sample Coordinator			
Company: CDM	· · · · · · · · · · · · · · · · · · ·	Date: 01/27/04			
	<u>-</u>	;			
Description of Modification:					
	air samples, field blanks will be o	ollected at a frequency of one per team per day			
		ield blanks to be analyzed each week will be			
		team's sample collection technique. Because			
		the blanks to be analyzed each week will be			
		analysis frequency (see attached table) will			
		y point field teams are requested to collect			
		that the appropriate quality control			
		nose field blanks collected but not submitted for			
		nks is observed. Frequency of field blanks			
		ification and will remain as defined I the			
Response Action Work Plan	(estimated August 2003). Although	gh the Dust SAP was approved subsequent to			
	s collected under the Dust SAP wil				
he frequency established in					
:	ber modification is documented or	n: 1-00011, page 41			
Reason for modification:	•				
		sample collection frequency is exceptionally			
igh given the number of san	npling locations that will be visited	as part of the Libby project; and has therefore			
		, historical site data for field blanks (collected at			
ne previous higher frequenc	y) indicate that occurrence of Libb	y Amphibole contamination on field blanks is			
ufficiently rare to justify a re-	duction in the number of field blan	ks analytically tested.			

-	on (circle one).			
Temporary	Date(s):			
	- If appropriate, attach a list of all applicable Index Identification numbers.			
Permanent (c	complete Proposed Modification Section)	Effective Date: July 7, 2003		
· · · · · · · · · · · · · · · · · · ·	n to SQAPP (attach additional sheets if ne when applicable): <u>Section B2, Field QA/QC</u>	, ,		
Technical Review:		Date:		
(Volpe Project	t Manager or designate)			

#### **Record of Modification**



to the Libby Sampling and Quality Assurance Project Plan Field Activities

LFO-000078

Instructions to Requester: Fax to contacts at bottom of form for review and approval.

File approved copy with Data Manager at the Libby Field Office (LFO).

Data Manager will maintain legible copies in a binder that can be accessed by LFO personnel.

Project QAPP (circle one):	Phase I (approved 4/00)	Phase II (approved 2/01)
	Removal Action (approved 7/00	Contaminant Screening Study (approved 5/
	Other (Title and approval date):	
	Other (Title and approval date).	<del></del>
SOP (Number and Revision R. Part 763, Subpart E. Ap	n No.): <u>Asbestos Hazard Emergen</u> pendix A (October 1987)	cy Response Act 40 CFR, Chapter 1, Subchapter
Other Document (Title, Nur	nher/Revision): Final Samplion an	d Analysis Plan Addendum (SAP Addendum),
	·	Study, Libby Asbestos Site, Operable Unit 4,
(December 1, 2003)	Sampling, Contaminant Screening	Study, Cloby Aspestos Site, Operable Offic 4,
(=300///2000)		
Requester: Terry Crowell		Title: Sample Coordinator
Company: CDM		Date: 01/27/04
Description of Modification:	The target analytical sensitivity of	0.0001 structures per cubic centimeter (S/cc) for
		a Not to Exceed Grid Opening (GO) count of 50
		50 GOs, the lab will count only until a target
		ach 50 GOs, whichever comes first. That is, if an
	S/cc is reached within 47 GOs, th	e lab will stop counting after 47 GOs have been
read.		
Field leabook and ness pur	mber modification is documented o	n: 1 00011: nage 44
Field logbook and page nui	nper modification is documented o	11. 1-00011, page 44
Reason for modification: Du	e to the inordinate amount of GOs	that may be required to be read in order to
		air samples, a target analytical sensitivity is
		ne target analytical sensitivity will not
compromise the air data; the	e air data will be usable for its inte	nded purpose as stated in the SAP Addendum.
		•
Duration of Modification (circ	•	
	· / ———————————————————————————————————	
Resi	dent address(es):	
- t	f appropriate, attach a list of all ap	plicable Index Identification numbers.
Permanent (comple	te Proposed Modification Section)	Effective Date: <u>January 9, 2004</u>
Dropagad Madifestics to CC	DAPP (attach additional sheets if n	processor state certion and name
number of SOAPP when a	anticable): Section 4 – Laboratory	Analysis and Requirements, subsection 4.2 -
Sensitivity Limits, will be mo	dified to include a Not to Exceed (	O count of 50 GOs for air samples.
Parison Do III		<u> </u>

Technical Review and Approval:	Date:
SPA Review and Approval:	Date:

44

Logbook 1-00011 Terry Crowell - Sample Coordinator Libby Asbestos Project USDOT/Volpe Center

1/20/04	During discussions between M. Rancy (Volpe Center) and the
	Emst Mobile Ashestos lab it was decided that for
	the Post Clean-up Evaluation personal and stationary
	air samples, a target analytical sepsitivity (AS)
	with a Not to Exceed haid opening (60) count of 50
<u> </u>	would be implemented. This is to writ the time
	required to read samples in order to reach the AS
	specified in the Post Clean-up Fraluation Samoling
	and Analysis Plan. In addition, if the target AS
	of 0.0001 S/cc (libby Amphibole) is not reached within
	50 FOS, a secondary target AS of 0.0002 S/CC will be achieved, whichever comes first. These
	changes are documented in 2 emails from M. Raney
-	to Emst which are attached. Requested by A. Autio (com)
<u> </u>	to write up the modification request form to the
	Post Clean-Up Fraluation sampling and tralysis Plan
	on 1/23/04. Modification Region + LFO-000078 sent
	to volve for review and approval on 1/28/04.
	<del></del>
<u> </u>	<del> </del>
<del> </del>	
	<del> </del>
	[
	Tem Crowell

#### Crowell, Terry

> PH: (406) 293-9066
> FAX: (406) 293-7016
> http://www.emsl.com

```
EMSL Mobile Lab - Asbestos (mobileasbestoslab@emsl.com)
                      Thursday, January 22, 2004 9:11 AM
To:
                      Crowell, Terry
                      Fw: Clarification
Subject:
---- Original Message -----
From: "Raney, Mark" <RANEY@VOLPE.DOT.GOV>
To: "'EMSL Mobile Lab - Asbestos'" <mobileasbestoslab@emsl.com>
Cc: "'Autio, Anni'" <autioah@cdm.com>
Sent: Friday, January 09, 2004 1:43 PM
Subject: RE: Clarification
> NO.
> Max GOs = 50
> 1st Target Sensitivity = 0.0001
> 2nd Target Sensitivity = 0.0002 (i.e., if you reach a sensitivity of
0.0002 within 47GOs, stop)
> If you can't reach 0.0002 within 50 GOs Stop at 50.
> Mark.
> ----Original Message-----
  From: EMSL Mobile Lab - Asbestos [mailto:mobileasbestoslab@emsl.com]
  Sent: Friday, January 09, 2004 3:37 PM
> To: Mark Raney
> Subject: Clarification
> Mark,
> In re-reading your email, I have a question. If I cannot reach 0.0001
> in 50 GO's, I then aim for 0.0002 S/cc or 50 GO's. Am I correct in
> the assumption that we are talking about an additional 50 GO's to
> reach 0.0002 S/cc (that is a max of 100 GO's for any sample)?
> EMSL Mobile Asbestos Lab
> 107 W 4th St.
> Libby, MT 59923
```

Crowell, Terry EMSL Mobile Lab - Asbestos [mobileasbestoslab@emsl.com] Thursday, January 22, 2004 9:11 AM Crowell, Terry Subject: Fw: Grid Openings Required, CE Samples ---- Original Message -----From: "Raney, Mark" <RANEY@VOLPE.DOT.GOV> To: "'EMSL Mobile Lab - Asbestos'" <mobileasbestoslab@emsl.com>; "Anni Autio" <autioah@cdm.com>; "Raney, Mark" <RANEY@VOLPE.DOT.GOV>; "Mary Goldade"
<goldade.mary@EPAmail.epa.gov>; "Bill Brattin" <brattin@syrres.com> Cc: "Rob DeMalo" <rdemalo@emsl.com>; "Charlie LaCerra" <clacerra@emsl.com>; "Kim Carr" <kcarr@emsl.com> Sent: Friday, January 09, 2004 1:06 PM Subject: RE: Grid Openings Required, CE Samples > Anni, > Based on Ron's email, past discussions, and a conversation I had with > Bill today, effective immediately the following rules should be followed regarding the Clean-up Evaluation Samples (CE). > The CE target sensitivity of 0.0001 S/cc for all air samples, should dified to incorporate a Not to Exceed GO count of 50 GOs. If a sensitivity of 0.0001c cannot be reached within 50 GOs the lab should count only until a target sensitivity of 0.0002 S/cc is reached or until they reach 50 GOs (which ever comes first). > Also, a MOD will need to be prepared to document this change. > Let me know if you have any questions. Mark. > Mark Raney > Environmental Engineer > US DOT / Volpe Center > Environmental Engineering Division, DTS-33 > phone: 617-494-2377 > cell: 617-694-8223 > fax: 617-494-2789 > raney@volpe.dot.gov > ----Original Message----> From: EMSL Mobile Lab - Asbestos [mailto:mobileasbestoslab@emsl.com] > Sent: Wednesday, January 07, 2004 7:02 PM > To: Anni Autio; Mark Raney; Mary Goldade; Bill Brattin > Cc: Rob DeMalo; Charlie LaCerra; Kim Carr > Subject: Grid Openings Required, CE Samples As requested, here is an expanded breakdown of the CE samples > currently in house with the required number of grid openings at > different analytical sensitivities. I've made some approximations, so > one or two of the

numbers

- > may be off by a grid opening.
- > R.

ASL Mobile Asbestos Lab

- > 107 W 4th St.
- > Libby, MT 59923 > PH: (406) 293-9066 > FAX: (406) 293-7016
- > http://www.emsl.com

#### **Record of Modification**



to the Libby Sampling and Quality Assurance Project Plan Field Activities LFO-000074

Instructions to Requester: Fax to contacts at bottom of form for review and approval.

File approved copy with Data Manager at the Libby Field Office (LFO).

Data Manager will maintain legible copies in a binder that can be accessed by LFO personnel.

Project QAPP (circle one):	Phase I (approved 4/00)	Phase II (approved 2/01)	
, ,	Removal Action (approved 7/00)	Contaminant Screening Study (approved 5/	(02)
	•	ost Clean Up Evaluation SAP (11/03)	,
			_
SOP (Number and Revision			_
			-
Other Document (Title, Num	nher/Revision). NA		-
,			
Requester: <u>Dee Warren</u>		itle: RI Field Team Leader	
Company:CDM	<u>-</u>	Date:11/20/03	
Description of Modification:	Change analysis on all samples co	lected under this SAP to AHERA.	
			- -
			<b>-</b>
<del></del>	<del></del>		-
Field logbook and page num	nber modification is documented on	NA – documented in e-mail from EPA RPM	-
Reason for modification: ISC	O data is not required to collect the	required data for risk assessment and evaluation	on, si
			-
Duration of Modification (circ	ele one):		
•		· · · · · · · · · · · · · · · · · · ·	
I f	anorongate attach a list of all and	icable Index Identification numbers.	
- N	appropriate, attach a list of all appr	icable index identification flumbers.	
Permanent (complete	e Proposed Modification Section)	Effective Date: 11/20/03	
•			
•	APP (attach additional sheets if ne	- · · · · · · · · · · · · · · · · · · ·	
numbers of SQAPP when ap	oplicable): Section 4.1 page 4-1 Ana	alytical Methods; All air and dust samples collect according to the AHERA method. Dust sample	<u>pest</u>
	5755.		<u> </u>
	<del>-</del>		
	<del></del>	· · · · · · · · · · · · · · · · · · ·	
echnical Review and Appro-	val	Date:	
(Volpe Project Manager or de			
EDA Davious and Anomyols		Date:	•
(USEPA RPM or designate)		Date	